The Impact Of Strategic Quality Research On Indian Universities (An Overview Of Research Perspective)

Abstract: Research needs a particular kind of environment. Research is an activity where every academician in various levels of educational institutions from schools to colleges to the universities focuses on academic and creative growth not only at the individual level but also at the group level, department level and institutional level. Research leads to new contributions to the mankind and society. The authorities at different levels of highest academic excellence need to deal with the issues of research facilities in terms of infrastructure, process, and reviews seriously to get better output. There has to be a good support system for continuity in the research work and activities. The process begins from advertisement of inviting young researchers to be in the system to pursue research work. The guidance of research scholars at different levels needs to be focused by the authorities at various stages of research progress. The society also expects a lot from researchers and feels that research outcome will serve the purpose.

Key Words: Research, Facilities, Environment, Review, Society, Outcome.

1. INTRODUCTION
There is an ideal type of research environment needed in every higher education institution. A small, focused, self-governing research group managed by a committed leader who is involved in daily research activities characterizes it. The social climate is good. Junior researchers are consciously supported, the culture is conducive to frequent in- tractions, and there is a mutual curiosity between researchers irrespective of position. Complementary competencies are sought for, resulting in a strategic flux of researchers in and out of the group and the establishment of external partnerships. The group is embedded in a larger organizational structure, providing a good infrastructure including technical resources and meeting points for interactions with researchers from other research areas. Funding is generous and long-term, giving room for experimentation. Time spent on applying for and reviewing grants is reasonable, and the administrative burden is eased by professional administrative support. Finally, research is linked to education in a mutually nurturing relationship. This ideal type of research environment seems to be applicable to most, if not all, research, be it natural sciences, social sciences, art – or any other creative work for that matter. As for the ideal type of societal environment surrounding a university, it is preferably relatively weak; the existence of external rules and regulations is limited, permitting autonomy, flexibility and apt variation within the institution. A relevant question is how successful environments with the features of the above ideal situation can be created or stimulated by the actions or considerations of university management at different levels.

The question is also relevant with reference to a continuous growing emphasis on university autonomy and requirements for strategic priorities at a university level. It is expected that universities are able to make strategic decisions on the research being carried out and to determine where to invest and divest. Before trying to answer this question, there is a need for some reservation. Even though the ideal type research situation describes the most consistent characteristics of environments that produce high quality research, there is of course room for great variation. Different discipline cultures have different norms and traditions, and one reason is that they require different approaches to be fit to purpose. There may also be exceptions from what seems to be fairly evident generic qualities. There are, for example, introverted environments that are successful – maybe just because they have been able to pursue inventive ideas without being curbed by the prevailing paradigm. There are also examples of researchers that are successful, although they spend a substantial share of their time working alone. A strong environment surrounding the university with regard to external rules and regulations, e.g. regarding the appointment of scientific personnel, may also have its advantages. It may support groups, e.g. women and young researchers, which traditionally have not belonged to the informal power centers within the institution. This might be conducive to high research quality, if it means that all competent researchers are made use of, irrespective of their background and alliances.

INSTITUTIONAL PERSPECTIVE
It is valuable for both at departmental and university management to gain a perspective on the organization as a whole. This may be achieved by using tools based on peer review, primarily assessing past performance. First of all, there is obviously a major difference between measuring the quality of research recently performed and the value of top professors’ CVs on one the hand, and creating a research environment of the future or knowing if a small, but promising, research group is the success of tomorrow on the other hand. Good performance as measured by statistical results may

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• Dr. N. KONDA REDDY, Department of Mathematics, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India. Email: nkrrstats@kluniversity.in
• Dr. A.V.N. Murty*, College of Commerce, Koneru Lakshmaiah Education Foundation, Vaddeswaram, AP, India. Email: dravnmurty@kluniversity.in
reflect a research environment that was flourishing several years ago, but that has declined considerably since then. Poor results, on the other hand, may reflect old sins in a now prospering group, or be explained by the group being newly established. This is why statistical data has to be complemented by additional information. Panels have been used at the local level and recently also in self-initiated university-wide evaluations. Peers are invited to evaluate either a department or a field, as in the national studies performed by the expert panels. These panels are often used in combination with statistical indicators. It is, with the limitations inherent in the evaluation systems, possible to make informed budget decisions based on past performance. Such decisions could either be a careful reconsideration of a certain budget percentage throughout the system or major investment decisions for a limited number of defined purposes. Panel data would be more appropriate for the research, which often also has a greater impact on research performance, while continuous statistical data would be fairer for the former. Some departments, or research groups, will occasionally run into troubles and cease to be productive. They are identified as low performers in statistical measurements, people suffer from the lack of progress, PhD students are recruited to a subject where there is a lack of scientific scholarship and rigor, and conflicts may arise among those remaining after potential high performers have left. In such cases, it is necessary for university management, department heads, deans or vice-chancellor, depending on the size and structure of the organization to take action as quickly and firmly as possible.

STRATEGIC EVALUATION OF PAST PERFORMANCE

One challenge is to take the next step and make strategic use of the knowledge gained from evaluations of past performance. It is therefore of great value that these types of evaluations are matched up with the strategic cycle of the organization, so that action points can be evaluated against goals and demands and be incorporated into a long-term strategy. There is a balance to be dealt with between detailed decisions on, for example, budget allocations and broad strategic considerations. Too much detail in the university’s decision-making, at all levels, college or by the university management, prevents academic freedom and creates a situation where the decision-making systems assume responsibility for issues best decided by active researchers. It is however believed that overall quality will benefit from strategy. Whether this is done at a research group, department, faculty or university level is of less importance. One problem is that many universities lack a “strategic requirement” within the organization while being quite elaborate in terms of the decision-making details on how to reimburse travel expenses. Thus, focusing on strategy is also a cultural shift where some universities need to move from “ignorance” of current and future research to “interest” in strategic development. University top management is responsible for having an overview and ensuring that strategic discussions and decisions take place.

Strategic direction, in terms, for example, of major investments, coordinated work to access cross-disciplinary programme research funding, long-term orientation of research funding or research agendas, has to be decided on. The possibility to govern universities strategically should not be overemphasized. Detailed strategies at a university-wide level on research content are bound to fail in most cases. The idea is, however, that there is a level in each research-focused organization where strategic discussions are appropriate and productive. A strategic agenda may be vague and have a simplified structure. It is more important to demonstrate a long-term interest in discussing the future of the research, and it is a management responsibility to emphasize and re-emphasize the requirement for such discussions and agendas. An important challenge for the university management at all levels is to create a sense of belonging. Having a sense of the bigger picture, i.e. identifying with not only the research group, but also the department, the faculty, school and the university as a whole creates the opportunity for strategic decisions that may not favor or benefit one’s own unit directly, but indirectly by making the institution stronger in some other way.

NEED FOR INFRASTRUCTURE

In the context of the evidence base presented above, major investment in infrastructure is one way to attract researchers and to promote the growth of a certain research area often at the deliberate expense of other areas. Even if significant scientific growth and quality appear more organically, it is of great value to the process to attract researchers and visitors with outstanding instruments and other types of infrastructure. Another type of infrastructure is the creation of cross-disciplinary meeting points around specific issues or subjects where researchers and research groups can promote a curiosity-driven research debate. These types of venues are also important to the humanities and social sciences, although instrumentation is of less importance. The empirical research presented earlier on confirms the importance of individual researchers for the quality of research. A research leader should have a clear vision, carefully recruit new members that complement the group, build bridges to other knowledge domains, and support young researchers. These points are crucial to the recruitment procedure. Many of our interviewees make references to the fundamental importance of recruitment processes and human resource policies. Recruitment has to be designed to be a tool in the creation of creative and sustainable research environments. Thus, the specific needs of the department in terms of academic and personal profiles of persons sought needs to be established and maintained throughout the recruitment process. The expectations on the researcher must be articulated. Who do we need, and is this really that person? This includes paying attention to qualifications beyond mere scientific skills, e.g. the capacity to mentor and inspire others, and to build fruitful collaboration. Although somewhat simplified, a dysfunctional researcher should be seen as the
responsible for the university; either the recruitment process, or the university’s continuous support of the researcher, was substandard. If there are no candidates with the right profile and the situation admits it, the recruitment process should be cancelled, and efforts should be made to identify and approach those who match the profile and then rerun the process. The recently launched Researcher Development Framework (Research Information Network 2011) may support the recruitment process in defining the skills that should be sought for among the candidates. Based on numerous interviews with experienced researchers, it articulates the required knowledge, skills, behaviors and personal qualities of researchers at different levels. In this framework, the knowledge, intellectual abilities and techniques to do research are specified, as well as the personal qualities and approaches needed to be an effective researcher. Needed skills regarding research governance and organization are made explicit, as are the knowledge and skills needed to work with others and ensure the wider impact of research. It should be remembered that universities are free to define recruitment procedures within some limitations. A number of things can be done to ensure a good recruitment process: competence profiles can be discussed and defined, traditional peer review can be combined with search committees, interviews and references can have a broader foundation for the hiring decision, the process can be sped up and so on. However, it may still be a problem that recruitment processes and hiring decisions are carried out separately from the strategic discussion and a discussion on the best overall use of the funds available. The challenge is to design recruitment processes where peer review has an impact as well as the strategic needs of the department, alongside the process being legally safe and transparent for applicants. Role models for open, safe and sound processes can be found in other parts of the world and may be subject to closer examination. Here it is of great importance to move beyond the recruitment policy of the research councils and finding the best group leader, also considering soft matters such as group size, social skills and research profile. Teaching qualifications should also be genuinely attended to, given the importance of securing research-teaching linkages. These considerations should all be a part of the departmental strategy process. Except for identifying the best researchers in accordance with the strategic ambitions of the university, the attractiveness of the institution to the best researchers is equally important. Can the university accommodate the needs of the accompanying family, for example? Are the intellectual environment and the resources attractive to talented researchers? Is the culture welcoming and inclusive?

ROLE OF DEPARTMENTS & RESEARCH GROUPS
Several of the characteristics of successful research environments point to- wards the importance of “soft issues”, such as team-building capacity, good social climate, frequent interactions, mutual interest in each other’s work, curiosity, respectful listening, being un-

hierarchical, etc. Attending to such questions has not been a top priority in the academic community, where science itself has been in focus and other issues have been subordinated. Consequently, these attributes have happened to develop spontaneously in some environments, but have been consciously strived for less often. Nevertheless, these soft issues seem to be highly associated with the quality of research. Researchers have put together a simple recipe for creative environments that includes many of these qualities, and corresponds well with the empirical research.

TAKING GOOD CARE OF YOUNG RESEARCHERS
Successful research environments tend to care for young researchers. The research leader knowingly supports younger researchers and they are respected partners in the scientific endeavor. Many successful researchers bear witness to the importance of having had a senior researcher that acted as a mentor and paved their way. These mentors act as role models, generously share their knowledge and enthusiasm, lend their good reputation, and give the novices access to important networks. Of course there is a potential downside to this. The informal character of the bond may contribute to nepotism, and the young researcher may become too dependent on the senior researcher. This way, the mentorship might introduce unfairness and have a conservative effect on the research. There are a number of deliberate actions that can be taken to improve young researchers’ chances of succeeding, in addition to well-balanced mentoring. One way is to provide career opportunities and show the university’s commitment to talented young researchers. They need to able to see a potential future where the steps are logical, achievable and trustworthy. Create positive recognition for good or excellent research performance, including among young researchers. Encourage mobility among researchers in general and for younger researchers in particular. Encourage, and fund, post-doc stays. Postdoctoral experiences provide young researchers with a new perspective and create an incentive to move after graduation. Young researchers need help to create networks in their core subjects, as well as in the university environment in a more general way. Create networks for research-specific purposes at national or international level, create university cross-disciplinary networks, introduce mentorship programme for example for promotion activities, etc. Joint researcher training courses and infrastructure between universities often lead to higher quality and an increased number of potentially fruitful contacts.

PROVIDING RESEARCHERS WITH TOOLS TO DEVELOP THEIR KNOWLEDGE AND SKILLS
Researchers need skills that go beyond their scientific expertise, especially when research is carried out in close inter- action with others. The university must offer courses in e.g. teaching and leadership, and must try to convince sometimes reluctant researchers that these skills are required in any modern research organization,
and even more so at a complete university, where research is an integral part of a broader mission. Increased attention to generic skills will most likely make researchers better equipped for research and teaching, but also more attractive to non-higher education employers. Most PhDs indisputably end up outside the university, and this contribution to the rest of the society is as important as providing academia with new researchers.

ENSURING GOOD ADMINISTRATIVE SUPPORT
High quality research cannot be achieved through administrative efforts, but poor administrative support may bring an otherwise fruitful research environment to its knees. In Sweden, researchers carry out administrative tasks, for which they are overpaid and poorly equipped. Either the university has to offer them the opportunity to develop these skills, or it has to offload the researcher and let specialists carry out these tasks. Efforts should be made to bridge the non-constructive divide that is sometimes prevalent between academics and administrators, and replace it with the idea of contributing different skills to achieve a joint goal. The core business of the university rests on academics. They are absolutely necessary, but not enough. They need the complementary skills provided by professional administrators, and administrators have to be aware of the conditions that characterize the core business to effectively fit their contribution into it. Academics and administrators are interdependent and, given that getting to know each other facilitates collaboration and understanding, they should meet more often. More attention should be given to “third spaces” where core activities and the administration are intertwined.

PROMOTING POSITIVE ACADEMIC LEADERSHIP
Good leadership at all levels is central to the development of successful research environments and that it should attend to the principle of first among seniors. At the same time, it is clear that academic leadership faces challenges that are different from other sectors, and those are specific and must be addressed. Given the key role of the academic leadership, efforts have to be made in creating attractive management positions and promoting willingness to assume management responsibilities. Provide due support in the form of mentorship, leadership courses and compensation for lost ground by allowing for a repatriation period, i.e. some research funding for restarting once the term of office ends. At the same time, be cautious in burdening successful researchers with leading too large groups or too many projects, since hierarchical structures are barriers to creative research. Make sure that the best leaders are recruited by investing in thorough recruitment processes. The focus has been on successful research environments, and the leadership required in achieving this. Most universities have to attend to more than this, given their broad societal mission. This also has to be considered when defining the qualities in the academic leadership. Senior or representative member of a group cannot exclusively pertain to mere research qualifications in its limited sense. A successful academic leader must also have legitimacy when it comes to matters of education and teaching (and with regard to other skills as well, leadership skills. The best researcher is not necessarily the best teacher, and may express a dutiful but unenthusiastic interest in teaching matters. Whether leaders have to be senior or representative member of the group in both teaching and research, or in one or the other, depends on the departments and or the institution’s mission and Profile. Today, there are established criteria for assessing teaching qualifications that can be used to decide on whether a candidate is senior or representative member of a group. The bottom line is that the leadership has to have a genuine strategic interest in all areas that are important to the university’s success. An alternative view of the senior or representative member of a group leader is that you become seniors by being elected by your peers. You may not necessarily have to be the best researcher, nor do the best teacher, but posse’s qualities that that make the fellow scholars trust him as a leader. To receive legitimacy, however, you would probably have to possess a minimum threshold of scientific credibility and teaching experience.

BUILDING A STRONG RELATIONSHIP BETWEEN RESEARCH AND EDUCATION
It cannot be claimed, based on the literature reviewed, that excellence in research is dependent on parallel excellence in teaching. However, it may still be a strategic interest of a department or a university to enforce high quality in both research and education. Several interviewees referred to the increasing divide between research and education – and lament it. The divide is partly due to diverging development processes. While education has been increasingly oriented towards mass, research is increasingly focused on excellence. The difference in recognition also contributes to the imbalance. Research efforts are rewarded by the system, while reward mechanisms for excellent teaching contributions are less developed. Nevertheless, nearly all interviewees stressed that a strong link between the two is needed to create a complete and dynamic university culture. Potential benefits may include an environment where staff can be trained in both competences for future careers, where students are provided with research insights as part of their training, where recruitment for research can be facilitated, and where several career paths and areas of excellence can overlap and feed each other. One interviewee suggested that there is plenty of scope for improvement, claiming that there is a largely unexploited potential in allowing education to stimulate research. Emerging research ideas might, for example, be tested in the educational setting, and students might actively take part in research activities in a more extensive way than is currently the case. Thus, education may provide a “test bed” for research ideas, and advanced level students can be part of research efforts. Such links, however, require a strong academic leader- ship in order for this to happen. In conclusion, efforts should be made to strengthen the nexus.
between research and education in a mutually nurturing relationship – it is part of the uniqueness of universities’ contribution to society. Research has always formed the basis for the student experience with regard to subject knowledge, but there is room for improvement when it comes to getting students to attain genuine research skills themselves. Conversely, students could contribute more to research in various ways, in addition to constituting the recruitment basis for future researchers. While the nurturing of this relationship primarily rests on the universities themselves, funding agencies also have a responsibility in accepting that researchers have to engage in teaching as well.

PROFESSIONAL CONDUCT

Obviously, the peer-review system has much strength, and there do not seem to be any better alternatives in spite of its flaws. To be able to defend the system, however, it has to be practiced in a responsible way. Bias caused by systematic unfairness to individuals or groups can be prevented by rigor in selecting reviewers and by reviewer training even if an evaluation of a short training course proved to have limited impact. Reviewer training should involve discussions on what constitutes responsible reviewer behavior. Based on her research on grant panels, Lamont has summarized what characterizes a good panelist. A good panelist shows up fully prepared demonstrates intellectual breadth and expertise, is to express the opinion in a clean manner, speaks across disciplinary boundaries, and respects the other panelists’ expertise and sentiments. Sound panel deliberations also follow the rule of deferring to expertise and observing disciplinary sovereignty. Good panelists defer to the expertise of others if they are not competent themselves, and follow the rule of cognitive contextualization, i.e. they recognize that different standards should be applied to different disciplines. In particular, multidisciplinary panels may have to make explicit their shared perspectives as well as their differences. Finally, a well-functioning panel maintains companionship. They may occasionally engage in dynamic discussions, but they always keep a respectful tone. Blinding of reviewers is often used to ensure unbiased assessment, although anonymity is often hard to preserve since there might be revealing clues in the paper or reviewer comments. Another approach is to maximize transparency through open review, making reviewers accountable for their viewpoints. The downside is that this openness might cause cautiousness and suppress just criticism. Since short training courses of reviewers seem to have limited impact, training might have to be delivered in some additional way. Doctoral education is where researchers’ attitudes and working behavior is shaped, and an in-creased focus on the elements of peer review during these formative years might be well placed. Doctoral education is similar to workplace learning. Although parts of the education are formal, much of the learning takes place in the everyday environment via informal observation and interaction with other researchers. This way, the supervisor and other senior researchers are important role models. Of course, supervisors already introduce their doctoral students to the peer-re- view system, but what if it was done in a more profound way? The coverage of issues on peer review could be strengthened in the continuing education of doctoral supervisors, including a thorough discussion on the personal attributes required from a high quality reviewer. Discussions on the strengths and weaknesses of the system of collegial decision-making might also be incorporated in doctoral education, as well as in leadership courses. Foremost, these meta-discussions on professional conduct and academic quality assurance processes and decision-making should be lively at all levels, from the university management to the department.

MAKING IT HAPPEN

The suggested strategies for stimulating high quality research call for wise university governance, balancing powerful steering when needed and deliberate passivity when appropriate. It should provide good opportunities for the growth and maintenance of creative research environments, and take action when research environments are dysfunctional – hovering between “do not disturb” and “intervene”. Decisions on research program number of personnel, work conditions and budgetary control should not be centralized. The university management should however be proactive in defining the university’s agenda in relation to the surrounding society. It should make the necessary strategic decisions, while safeguarding the qualities inherent in the collegial system. Finally, higher level management should be actively involved in issues concerning research funding and recruitment.Is the current system of university decision-making capable of doing this? Strategic discussions are issues that are well suited for a reflective and mature discussion by contemporary boards. Many interviewees agree on this, but are also hesitant in the current faculty board capacity to discuss and make decisions at a strategic level without becoming lost in disciplinary conflicts of interest and maintain the standards of decisions. Boards may have difficulties in reaching bold decisions on the future of the university beyond next year’s budget cuts or increases. In that case, strategic discussions have to be organized differently, by department groups or in university-wide settings. A contemporary decision-making model often fails to identify and act in terms of low performing research groups. The tendency to leave serious problems unresolved for an unreasonably long period may affect research performance and quality. Research groups where substantial resources are spent but not much is gained in terms of research output, and where research education and research networks are of low quality, may be allowed to continue. Performance-based subsidies, decided on through collegial measures, may create a step-by-step closure of a particular research area, but this may take a substantial period of time. Problems may be aggravated during the period and PhD students can end up having been recruited to a low performing group. Problems of this kind need to be brought to the attention of university management (at an appropriate level) and acted upon. A collegial decision-making procedure needs to be given both tools and leadership to be able to do this.
SUGGESTIONS
This section will, first, summarize recommendations or issues of importance for research quality previously discussed and, second, highlight a few areas on a general policy level which we consider to be of importance for research quality from a university system perspective. It should be noted, however, that there is no “one way” or a “quick fix” to ensure high quality research. There are many different university settings, different research approaches and different success criteria depending on research areas, scientific traditions and university strategies. What we suggest is a much more considerate and deliberate approach on all levels in a university, a sincere interest in research quality by decision-makers as well as research leaders, and mechanisms to ensure a monitoring and guidance of high performing research groups as well as correction and intervention when performance is below standards. Our recommendations can be categorized into the following groups:

MONITOR AND ANALYZE
This includes issues where the main focus is to ensure a good overview, to have correct information and to oversee research groups in the university. It includes the following:

- Gain institutional perspective – evaluate past performance
- Use collected data – past performance meets strategy
- Pay due attention to the inner life of departments and research group

This includes issues where defined and direct action needs to be taken in order to achieve strategic goals. Action is not only required by university top management, it may be more appropriate to include many of the issues suggested as part of the responsibility of deans and department chairs. The items listed below are not meant to be final or exhaustive. They are more of a summary of notions that have been discussed in the report and that may be core elements of a university agenda to promote research quality. They have to be further elaborated on, questioned and added to.

- Nurture successful departments or groups and provide them with as much autonomy as possible
- Ensure long-term funding of promising research
- Intervene promptly in departments or research groups that are dysfunctional with regard to processes and outcomes
- Create a good scientific infrastructure with regard to technical and intellectual resources
- Design effective and deliberate recruitment processes
- Take good care of young researchers
- Provide researchers with tools to develop their knowledge and skills
- Ensure effective administrative support
- Promote positive academic leadership
- Build a strong relationship between research and education

POLICY
A third category includes issues that are more general and require long-term policy making efforts. We consider these issues to be of fundamental importance for the continuous development of research quality in the university sector and for the discussion on why research and universities are important and how high quality can be achieved.

Renovate the system for decision-making
- Articulate the specific values to which universities respond and the
- way in which this contributes to a wider societal development

To a certain degree, it is only possible to act upon the policy level issues presented above within a single university. They include major cultural properties of the university sector and may thus be subject to a comprehensive and sector-wide discussion. We would like to emphasize two such areas, taken from the policy category presented above. These areas could be subject to initiatives in terms of creating a “think tank” providing the university sector with policies, initiating new recommendations for university practices and making the interest of the "republic of scholars" manifest. One issue that has been brought up for discussion by interviewees, is debated in literature and has been an underlying topic throughout this report is the functioning and quality of the collegial system. Since it is a fundamental issue for higher educational institutions we conclude that it needs to be subject to a closer investigation and analysis. It has not been possible to do so fully within the scope of this report, but we suggest that this is made an area for further discussion, analysis and, potentially, action and policy-making activities. The notion of a free academic space, both ideologically and politically, is inherent in universities. It is a fundamental conclusion that the collegial decision-making system for quality control is indisputable. As mentioned, it is used for a multitude of tasks such as recruiting, funding and publishing. It is organized through academic councils and decision-making bodies within universities, as well as through peer-review assignments in connection with publication and recruitment decisions. In spite of this, we must be prepared to discuss the pros and cons of the decision-making system, including both peer review and contemporary decision-making, if for no other reason than in order to make active decisions on what should be left to history, and articulate how the core elements of that should be preserved. A contemporary system based on open, constructive, well-founded scientific discussions should be preserved most actively, while tendencies towards group thinking, academic abuse and nepotism should be dealt with. The system aims at safeguarding the quality of research and teaching – not protecting members of the academic community from external assessment. The tasks for which the peer-review system is needed seem to have increased over the years. The number of recruitment and promotion evaluations has increased, the number
of applications for funding where peer review is needed has increased, and the journal publication tradition has been adopted by more scientific areas. Peer-review assignments tend to take up more and more time for individual professors. At the same time, professors tend to write more and more applications for funding, positions and promotions. The contemporary situation is that the most important quality control system the contemporary where peer-review system – is put under a great deal of stress. It can- not easily be changed by individual universities or individual research funding agencies. There are three areas within the contemporary system where renovation is needed:

1. The contemporary working environment: Research groups are, from a collegial point of view, autonomous in terms of research questions and research orientation, but they are also the most immediate working environment for researchers and educators. The culture nurtured within a group is thus of importance for the performance of the group. Mentoring and coaching of colleagues is one responsibility of the group. Networking and deliberate group enhancement processes are others. Would it be possible to facilitate the quality of collegial working environments through deliberate activities and actions?

2. The contemporary peer-review system: Peer reviews are used for a large number of purposes. Many have been mentioned in the report. These can be internal promotion reviews, panel reviews of research performance, recruitment reviews, publication and application reviews. It is a system with strong quality assurance components, although not always free from criticism. It may be biased in terms of gender issues, it may be so heavily used that quality can be questioned and it can be too time-consuming or too widely used. Would it be possible to find a more up-to-date peer-review system where the quality assurance can be kept and the dysfunctions can be avoided?

3. The contemporary decision-making system: Collegial boards or councils are often used within universities to reach decisions on issues where academic judgment and rigor are required. Such boards are normally elected. It is however not evident what kind of decision power collegiate decision-making is best equipped for and for which development stages of a university or research environment that collegiate decision-making is a necessity. Would it be possible to design a more appropriate division of labor between the collegiate decision-making on the one hand and managerial decision-making on the other hand?

THE ROLE OF THE UNIVERSITY IN SOCIETY
A second fundamental issue that has been part of the discussion so far, and also brought up by our observation, is an ambiguity on how to describe and understand the role of universities in society. What are the relevant expectations, how commercial should and academic needs be balanced, how this role should be related to the political system, etc. Although universities are responsible for proactively creating environments that are conducive to high quality research and teaching, as reflected in this report, they depend on their relationship to the rest of the society in doing so. The role of universities in our contemporary society is clearly a topic that needs to be addressed in the strategic university management. Thus, when outlining agendas, it would be helpful to have an insightful and deliberate analysis of expectations, stakeholder positions and the long-term position of the university as a starting point. We thus suggest that the fundamental question of the role of the university in society is an area where universities, as a cluster, need to pay some attention. The main reason should be that if this is not done by the sector, the position will be carved out by stakeholders outside the sector. The self-evident position of universities in contemporary society is challenged from time to time. Requirements for more audits, competition from other research providers and setting up parallel educational systems are all indications of a challenged position. Politicians can sometimes be quite outspoken in terms of criticizing university performance and calling for better efficiency measures. Universities are confronted with signs of distrust alongside increased autonomy. There is a constant tension between the role of the universities as independent societal institutions with a long-range mission to strive for the common good, and contemporary society’s immediate concerns and wish for instant usefulness – where the universities are expected to contribute effectively to the knowledge-based economy. A thought-through balance between these legitimate aims is needed to reach priorities that ensure the fulfillment of both. Basically, this is a confrontation between the republic of scholars and the stakeholder models for governing universities, which were discussed in a previous section. The number of stakeholders has increased as the university sector has grown and become an increasingly integrated part of society and a dominant actor in terms of knowledge production and dissemination. A meeting between powerful stakeholders and the republic of scholars is troublesome if only some stakeholders have the power to articulate their claims while others are silent and not present in the debate. It is even more troublesome if one of the weak stakeholders is “the republic of scholars”, i.e. research professionals, professors and university representatives. If that is the case, single stakeholders based outside universities may be able to execute a one-dimensional impact on policy-making for universities while the university sector is unable to respond or defend academic values. Stakeholders include tax payers (in a general sense), industry, welfare organizations, funding agencies, etc. It is not a question of whether the claims are legitimate or not, it is a question of the asymmetry in how well different claims are articulated and communicated. In some cases, the university sector could initiate a discussion with stakeholders to reach a common understanding and to integrate different sectors’ strategic agendas. Funding agencies, for example, with at least partly collegial
structures may be invited to discuss funding schemes that are a better fit with university strategies and priorities. Industry representatives may be invited to discuss long-term research agendas. And so forth. In some cases it may thus appear as if the university sector is among the weak stakeholders and this therefore leaves the field open for others to set the agenda for debates and decision-making aiming at university reforms, claims and priorities. It is obvious that "the republic of scholars" needs to articulate a contemporary version of the reason for the existence of universities. Such an articulation is perhaps best described as a university-based "think tank" and a "voice" that is able to articulate the specific values to which universities respond and how these contribute to a wider societal development.

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