

STRATEGIC MEASURES FOR COMPETITIVE INTERNATIONALISATION OF HIGHER EDUCATION AND RESEARCH

Andreas Gothenberg, Executive Director, STINT – The Swedish Foundation for International Cooperation in Research and Higher Education, Stockholm Sweden

Hans Pohl, Program Director, STINT – The Swedish Foundation for International Cooperation in Research and Higher Education, Stockholm, Sweden

Niclas Adler, Professor, Jönköping International Business School, Jönköping, Sweden

Abstract

Strategic internationalization is critical for the competitiveness of individual universities as well as the knowledge system of nations. We present some of the challenges that have been identified in a series of interviews with the leaderships at several universities in Sweden. We also present strategic measures intended to tackle some of these challenges. Although the universities have significant operational volume there is a lack of models for risk management of international ventures. An increased internationalization that is both successful and sustainable is considered to require competence, systematic routines and structures. New opportunities in internationalization also set new demands on the leaderships and organizations in a globalized academic landscape. International research cooperation is so far predominantly driven by entrepreneurial academicians in an ad hoc manner. They often lack interaction with the university management, which means that the success they have is often not exploited in the international strategies of the university. When they are capitalized it is primarily in a bottom-up approach. There is evidently a need of resources to manage the opportunities and challenges related to internationalization, in terms of time, funds, and competence. Aside from traditional financial support, alternative measures to support the university leaderships in their management of strategic and systematic internationalization are needed. Four distinct actions intended to strengthen a university in a foreign region or market are presented.

Foreword

Strategic internationalisation is critical for the competitiveness of individual universities as well as the knowledge system of nations. In this article, we will present some of the challenges identified in a series of interviews with the presidents of five universities in Sweden.

Although these universities have significant operational volume there are no risk management models for international ventures. Successful and sustainable increases in internationalisation are deemed to require competence, systematic routines and structures. Moreover, in a globalised academic landscape, new internationalisation opportunities make fresh demands of organisations and their management. To date, international research cooperation has been driven, ad hoc fashion, predominantly by entrepreneurial academics. These often have little interaction with the university management and so their successes are seldom exploited in the international strategies of their universities. When they are capitalised it is primarily via a bottom-up approach. There is evidently a need for resources to manage internationalisation opportunities and challenges in terms of time, funds, and competence.

We will also present strategic measures aimed at tackling some of these challenges. Aside from traditional financial support, alternative measures are needed to support university executive groups in their management of strategic and systematic internationalisation. Four distinct actions are presented aimed at strengthening universities in foreign regions or markets.

The analysis has been consistently based on a management and executive perspective.

Summary of conditions for strategic internationalisation at Swedish universities and colleges – a management and executive perspective

The international demand for higher education and research and the development and management of universities and colleges is considerable and still on the increase. This is particularly apparent in developing countries with young, rapidly expanding populations. This combination of rapid strengthening of the position of educational establishments and activities in developing countries is clearly transforming the global landscape.

Student and researcher exchanges and international cooperation have long been an integral part of the activities of universities and colleges. Research activities have long addressed an international audience and, in most spheres, been conducted by international teams, based on international data and focused on international publication.

English-speaking countries have long regarded higher education as a vital export, with the emphasis on fee-paying students attending the educational establishment's home campus for training.

In recent years, the trend has increasingly been a significant involvement and establishment of universities in new geographical areas. There are examples of everything from advisory roles to outright operational responsibility and, sometimes, the establishment of all-new campuses. As a rule these have been in the Gulf States, UAE and Qatar in particular, but also in East Asia.

Apart from the obvious opportunities afforded by proximity to a burgeoning group of talented students and additional funding, a growing number of educational establishments have been persuaded of the educational benefits of more internationalised operations and have realised their importance in developing and recruiting for faculties and operations. Moreover, a growing number of political leaders have recognised the value of developing broader international cooperation, trade and joint, cross-border initiatives.

From an international standpoint, the approach of Swedish educational establishments is still fairly domestic. There are relatively small volumes of international students, a minor share of international staff and heavy dependence on state education and research funding. However, given the size of Sweden's economy, a relatively large number of Swedish educational establishments feature in various prestigious international rankings.

Increased international marketing opportunities, heightened international competition for talent, interest and strategic partnerships and an increased need of greater research volumes and rapid implementation of new Swedish funding for students from third countries are fuelling demand for a strategic outlook, analysis and plan for the ongoing internationalisation of Swedish educational establishments.

A major responsibility for this strategic internationalisation currently falls on university management. The Ministry of Education and regulatory authorities offer limited instruction and limited support. University executive groups seldom have the structure or agenda to support a clear focus on strategic internationalisation. Individual researchers and teachers run a major proportion of international research and training initiatives and, combined with various exchange programmes, each establishment has hundreds of international partners. However, from a strategic perspective, the setting of priorities and management agendas rests with the individual vice-chancellors and their immediate senate colleagues. Swedish research financiers are not currently an obvious strategic internationalisation partner for the management of educational establishments.

The wider internationalisation landscape

Higher education and research is one of the world's most rapidly growing sectors. It is currently undergoing a transformation and is characterised by the following trends.

Rapidly increasing volumes:

- Global demand for higher education has increased by more than 50% in the last 10 years – more than 160 million students are currently in higher education, and this is expected to increase in the next decade (OECD 2009, UNESCO 2010, IIE 2010).
- The volume of research (and need for critical mass) at the world's universities and colleges is growing strongly (OECD 2009, IIE 2010); over 7 million researchers are spending over USD 100 billion on research activities and generating more than 1.6 million publications per year, an increase of 45% over 2002 (Royal Society 2011).

Greater internationalisation and the increasing prominence of developing countries:

- The number of students studying overseas (for at least a year) has now exceeded 3 million and is anticipated to exceed 8 million by 2025. Over half still go to English-speaking countries but developing countries in particular are taking rapidly growing market shares (OECD 2009, UNESCO 2010, IIE 2010).
- In some spheres, the research profile is dominated by international students; over two thirds within computer science, economics and engineering and over half within physics and mathematics in the US. The two universities currently feeding the most students into American research education are not American but rather the Tsinghua and Peking Universities. (Hunter 2009, Wildavsky 2010).
- In spheres such as physics, medicine and economics, over half the most published authors are active in a country other than the one in which they completed their basic education, with the US and Switzerland as the largest importers of elite researchers (Hunter 2009, Wildavsky 2010).
- Co-publication of researchers from several countries has increased greatly in the past decade and within certain fields (medicine and computer science). This currently accounts for 40% of publications (OECD 2008, Wildavsky 2010, Royal Society 2011).
- China has trebled its share of the world scientific publications (currently the second largest producer after the US and, if the current trend is extrapolated, China will surpass the US and take the lead during 2013), whilst the US, Japan, Russia, England, Germany and France have declined (Royal Society 2011).
- New universities are being set up in the Middle East and Asia with major ambitions and significant funding. KAUST on the outskirts of Jeddah commenced operations with an initial endowment of USD 10 billion (Wildavsky 2010).

New technology, increased transparency, heightened expectations of cross-border collaborations, new types of competitors and increased requirements for professional management:

- The rapid introduction and extended use of new technology in all educational establishments' areas of activity, enabling simpler, more cost-effective cross-border collaboration (between research colleagues, teacher-student, teacher-student-workplaces, alumni) and opens up all new educational opportunities (Johnson 2010).
- Rapidly growing international transparency and comparability combined with increased importance of international accreditation and ranking.

- Increasing demand for educational establishments' capacity for cross-border collaboration, building research and innovation competence in more geographical areas, their capacity to participate in and occasionally also take a leading role in establishing and developing "innovation systems", "Knowledge Triangles", "Triple Helix systems" and to contribute to increased international trade and collaboration (BOoS 2007, OECD 2009, IIE 2010, Becker 2009, Björling 2010, Royal Society 2011).
- Rapidly increasing competition from private and profit-driven educational establishments (almost half of the students annually enrolled go to these establishments) working with other business models, a different customer focus and different access to investments for building a market presence. (OECD 2009, IIE 2010).
- Rapid growth of new actors such as mega-universities (>1 million active students), "multi-campus universities" and campuses with multiple international universities co-located. (OECD 2009, IIE 2010, Becker 2009).
- Increasing demand for professionalised management of educational establishments (Observatory 2011).

Based on the interviews we conducted with five Swedish university presidents/vice-chancellors and the documents which describe the internationalisation activities at the educational establishments in focus, four clear patterns emerge:

- All the management groups (based on their respective circumstances) want to run an operation which maintains good international standards and is a part of the ongoing development of the international higher education landscape.
- All the management groups see the value of international research and education operations and several of the management groups see the need for enhanced funding in cases where funding for research as well as education is drawn in, to a greater extent than previously, from countries other than Sweden.
- All the management groups believe that an educational establishment can and should play a role in internationalisation investments, alongside both companies and social actors.
- The management groups are also agreed that, now and for some time hence, there is a considerable market window which Swedish educational establishments can utilise and exploit. There is also a relatively major consensus that it will be easier for Swedish educational establishments to successfully establish partnerships now than in future.

Swedish "directives" and expectations – executive and management experiences

In its bills, the government has clarified its expectation that Swedish universities and colleges will work towards continued internationalisation of operations; the Borderless Knowledge (Bill 2008/09:175), the Budget Bill (Bill 2009/10:1) and Competing with Quality (Bill 2009/10:65). Just as with the Swedish National Agency for Higher Education's reports on a Borderless College (HSV 2005:1), Good Examples of Internationalisation (HSV 2005:6) and Foreign Students in Sweden (HSV 2008:7), the emphasis is on student exchanges, education conducted in languages other than Swedish, common exams, transferability of teachers and tuition fees. To a lesser extent it touches on other important issues facing educational establishments' management and executive groups: marketing and establishment strategies, business models, risk management and attracting international research funding.

The educational establishments' internationalisation efforts will be followed up in the annual remit and each establishment is expected to have a clear policy and a plan for its internationalisation work. The

tuition fees for students from third countries introduced as of 1st July 2011 place yet more demands on the international competitiveness of Swedish educational establishments. There is a clear consensus amongst Swedish educational establishments that the presence of international students is a great asset to the operation and there is an expressed ambition on the part of everybody to try and continue attracting students from third countries even now that the tuition fee reforms are in place.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, three clear patterns emerge:

- The management groups have found neither pronounced demand nor expectation from the Ministry or regulatory authorities and no clear national strategy for the internationalisation work, nor any restrictions or clear obstacles as to educational establishments' strategic internationalisation. The management groups have found that it is their own aims and wishes which are setting the agenda, the identification of new markets, the attraction of new funding and the forms these take. Moreover, a number of respondents added that neither feedback nor comments were given on the policies, plans and follow-up reported from the internationalisation work. The management groups felt the way in which the new reforms for tuition fees are implemented strengthens their perception of no clear strategy for internationalising higher education; it is purely a matter of cost savings.
- The management groups did not feel that the Ministry could be compared to an owner setting up an owner's directive. Several of the respondents emphasised that universities are and should remain as autonomous as possible and should not seek a dialogue with the Ministry which resembles an ownership dialogue.
- The management groups are in relative agreement as to what the crucial indicators are for a successful internationalisation, focusing on the presence of international students, international research collaborations, joint publication in important journal and the presence of international research funding (particularly from the EU). With the new tuition fee reforms, the volume of fee-paying students will become an important new focus measure.

Internationalisation efforts in the work of management and executive groups

Although the circumstances of educational establishments and the outlook of their management groups as to their involvement varies, the educational establishments which have been the focus of this analysis all have a major portfolio of planned and ongoing initiatives.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, five clear patterns emerge:

- Internationalisation plays an important role in the strategy, executive efforts and management efforts of the educational establishments and, in the absence of national initiatives/support and considering the great variety of faculty-driven initiatives, they consider it more important than ever for management to have a definite role. A number of key senior management people spend a great deal of their time on internationalisation issues. However, they are more or less agreed that it is a management issue and that the executive groups devote less attention to this issue.
- The management groups have an important role gathering inspiration and benchmarks through their own travel and networking. A number of them use organised trips to ensure exposure and implementation of activities.
- The management groups are agreed that there are no clear management models, risk management models or tried and tested business models to rely on, but rather that it is a continuous learning journey. The management groups believe there is a great deal to be learned from others

particularly where it concerns using alumni networks for the internationalisation work but also in how to cooperate with companies and government agencies. There is also felt to be major, untapped potential in partnerships with small and medium-sized enterprises in various thematic internationalisation efforts.

- The management groups are agreed on the importance of working across faculties, students and working groups in regard to internationalisation efforts and there are several examples of new, interdisciplinary organisations.
- The management groups are agreed on their experiences of sandwich and double-degree programmes at Bachelor's, Master's and PhD levels being a good basis for enduring partnerships. There is a tradition of starting partnerships with occasional research projects and student exchanges, but there are few examples of this leading onto the broader institutional partnerships. There again, several of the respondents describe a reverse logic in which an investment in an ambitious joint training programme drives many other forms of partnership.

Situation of management and executive groups

In all of the educational establishments in focus there is a small management group with overall responsibility for the strategic management of the establishment and strategic internationalisation.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, three clear patterns emerge:

- There is clearly a limited amount of management time, given the complexity of the activity; this also has consequences for the time and attention available for strategic internationalisation. In several educational establishments, even large ones, only the vice-chancellor and director of administration work full-time on their management roles. The preparations for and support to the various management roles are limited compared with management roles on the same scale in other industries and social sectors. In addition, the expectations of staff and colleagues focus more on administration than management.
- There are clear challenges in the circumstances for strategic product, market and business development which have important consequences for internationalisation work. Compared to the management of similarly sized activities in other industries and social sectors, the management has very limited access to financial resources which it can allocate based on its priorities and strategies. Moreover there is no tradition of long-term investment in product, market or business development. Despite the large financial reserves at several of the major Swedish educational establishments, it is difficult for their management to use them in the initial, more uncertain and unclear stages of an effort. External venture capital and legitimisation of new efforts can be crucial in facilitating further, more ambitious efforts.
- In the higher education sector there is a limited tradition of benchmarking relating to strategies, business models and management models – particularly in regard to how good the benchmarking is regarding ongoing research and development activity.

Opportunity for Swedish exports of higher education and research

Fee-paying international students have long constituted an important export revenue for a number of English-speaking countries. A strongly growing export revenue in recent years has been educational establishments' setting up of campuses in other countries and support for development and running of educational establishments abroad – especially in the Middle East and Asia. One issue included in our study has been the opportunities for Swedish exports of higher education and research.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, four clear patterns emerge:

- As previously mentioned, the management groups agree that there is now a significant market window for Swedish universities and that, if Swedish higher education institutions wish to maintain or improve their competitive edge, they must boost their internationalisation activity and attract international funding for research and educational activities. However, there are a number of challenges to be overcome: Sweden is not established as an attractive option for international higher education; other than EU funding, there is currently no successful experience of attracting international funding for research at Swedish universities; there is limited management capacity to provide for the development and operation of international institutions; currently there is limited interest from the management of Swedish universities to even consider establishing campuses outside Sweden.
- The management groups see good prospects for cooperating with some other Swedish educational establishments, industry or government partners in their strategic internationalisation work. However they see difficulties in coordinating the work with the entire group of Swedish educational establishments, which they regard as rather heterogeneous.
- There is a fairly strong consensus that Swedish export prospects will be greatly improved if Swedish coordination efforts are made now, in less competitive regions and markets.
- There is also a fairly strong consensus amongst the respondents that the prospects of exploiting the whole innovation and Triple Helix systems (i.e. a Swedish experience and a Swedish cross-border working method) are much greater than just focusing on individual educational establishments and their own offerings. There is also agreement that this requires new business models and models for risk allocation and management of the joint initiatives.

Needs and requirements of management and executive groups

Various national initiatives have been carried out in comparable countries such as Denmark and the Netherlands to develop the prospects of educational establishments' strategic internationalisation. A number of other such national initiatives are now being planned in other countries.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, four clear patterns emerge:

- The management groups agree that their prospects would be improved by national initiatives which better promoted Sweden as an attractive and competitive research, innovation and education country.
- The management groups agree that an important success factor will be the ongoing attraction of talented students from third countries. In this regard, the capacity of Swedish educational establishments to attract grants and scholarship funding will be crucial. In several other comparable markets the educational establishments offer possible grant funding for around one third of the total tuition fees.
- The management groups are agreed on the value of having opportunities for the management at educational establishments to seek co-financing for priority and strategic internationalisation efforts.
- The management groups are agreed on the value of having access to a strategic dialogue with experienced international experts, as well as help organising training efforts to support internationalisation and receive help in the form of practical contact creation and support activities in vital markets.

Financiers and internationalisation

With no clear expectations from the Ministry and regulatory authorities, or any specially dedicated funding for strategic internationalisation in the annual remit, there is a potentially important role for other financiers in creating incentives and support for running educational establishments' strategic internationalisation.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, four clear patterns emerge:

- The management groups agree that the role of various financiers in the internationalisation work of educational establishments is limited, particularly from a management perspective.
- The management groups agree that there are now more financiers who can play various roles in educational establishments' strategic and priority internationalisation efforts but that it is not simple for the management groups to find a way of coordinating these actors and initiatives.
- The management groups agree that the implementation of tuition fees for students from third countries creates a whole raft of challenges which it might be possible to alleviate if financiers offered grants.
- All the management groups are very positive about establishing a strategic dialogue on internationalisation issues with a financier.

The greatest challenges and obstacles to strategic internationalisation

From various past analyses, successful experiences in other countries and regions and from the interviews in this study there is general agreement that strategic internationalisation is crucial to educational establishments' future competitiveness and continued development. However there are considerable challenges and obstacles which must be overcome if Swedish educational establishments are to match or exceed the successes of others.

Based on the interviews conducted and documents describing the internationalisation activities at the establishments in focus, three clear patterns emerge:

- The management groups agree that there is limited management time, a paucity of clear tools and models and limited preparations for managing the many opportunities and challenges of strategic internationalisation.
- The management groups also agree that the limited opportunities to allocate resources to new internationalisation efforts, developing new offerings, developing new markets and new business is slowing down the growth.
- The management groups are also agreed that the other two challenges are stymied by the lack of any real presence on strategic markets plus the fact that Sweden is not established as an educational destination and there is a lack of sufficient experience in attracting international funding for research in Sweden. In other words, establish a necessary presence on priority markets requires more management time and a further reallocation of resources (both of which are limiting factors).

Conclusion and policy implications

This analysis presented here has revealed clear opportunities for strengthening universities' management groups in their internationalisation efforts, in terms of collaboration and support for creating a

market presence in priority markets and in co-financing the earliest stages of strategic internationalisation efforts.

Several educational management groups consider that an increased proportion of funding for both research and education needs to be attracted internationally in order to develop activities and that the position of Swedish higher education establishments must be exploited now that there are significant market windows. The educational management groups also regard collaboration with companies and government agencies as key to internationalisation.

To facilitate the educational establishments' need to create contacts at university management level and have a presence and support activities in key markets abroad, we propose a link in a value chain between establishments, financiers and actors from abroad. The remit of this link might incorporate:

- identification of funding sources for Swedish educational establishments in another country;
- identification of partnership opportunities for Swedish educational establishments for Swedish and regional companies in another country;
- initiation of dual-degree programmes between Sweden and another country;
- increasing Swedish educational establishments' recognition in another country.

In the interviews the educational establishments also expressed the view that external venture capital, co-financing and legitimisation of new efforts may be crucial in facilitating additional, more ambitious and complex international strategies. Moreover, there was a desire for access to a strategic dialogue with internationally experienced experts plus practical help in creating contacts and supporting activities in crucial markets. To respond to this need, STINT launched the funding programme Strategic Grants for Internationalisation in December 2011.

The purpose of the programme is to make an innovative impression on the system relating to internationalisation of higher education and research. The goal of the programme is to support projects which are strategic for the educational establishments from an internationalisation aspect and, at the same time, take on board the experiences and incentives of individual frontrunners. The educational establishments have been invited to nominate a maximum of two projects each in research and/or education. This is intended to reach the individual researchers and university teachers working in projects of strategic interest for each establishment. The choice of projects will be based on:

- The anticipated contribution of the university's activities to strategic internationalisation.
- The level of renewal in regard to internationalisation in the project and/or forms of international cooperation and potential of the project.
- The university management's commitment to and involvement in the implementation.
- Planning and approval of the project plan. For example, the quality and level of clarification in the project plan.

The projects will be reviewed by a group of internationally renowned experts in the field of international higher education and research. The deadline for applications was 31st March 2012. A total of 31 applications were submitted, a relatively high number considering this was a brand new programme. Only university vice-chancellors of the 40 or so Swedish educational establishments were eligible to apply.

Policy recommendations for improved competitive internationalisation at university level include the following strategic measures:

- Additional efforts to strengthen the capacity and competence of university leadership will accelerate successful internationalisation.
- Dedicated competitive funding opportunities for the internationalisation efforts of the university management can be an important driver.
- Joint efforts to create a presence on strategic markets and facilitate real internationalisation experiences among senior faculty and senior university management can be another important driver.
- Finally, access to competence and knowledge regarding funding opportunities in countries of strategic interest can enable more ambitious internationalisation efforts.

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