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mednarodna fakulteta  
za družbene in poslovne študije  
International School  
for Social and Business Studies  
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Universitat Autònoma  
de Barcelona



## PROJEKT HEIDA

*Sprejemanje odločitev na podlagi podatkov za internacionalizacijo visokega šolstva:  
Premostitev vrzeli med predavatelji in administracijo z uporabo učinkovitih komunikacijskih  
platform*

Referenčna številka projekta: 2014-1-TR01- KA203-13128

<b>INTELLECTUAL OUTPUT</b>	O2
<b>NASLOV POROČILA</b>	ŠTUDIJA PRIMERA – OSNOVNO POROČILO
Datum oddaje	30.11.2015
Partnerska organizacija predloži poročilo	Koç University



## Projekt HEIDA – Osnovno poročilo

### UVOD

Ideja projekta HEIDA se odziva na dve specifični težavi, ki sta prisotni v večini visokošolskih zavodov, ne glede na njihovo velikost, starost, vire financiranja in akademsko ponudbo: 1) potreba po orodju za skupno zbiranje in uporabo podatkov za sledenje dejavnostim internacionalizacije institucije širše od zgolj mobilnosti in partnerstev, ter 2) vrzeli v komunikaciji in zbiranju podatkov, ki pogosto obstaja med fakulteto, osebjem na akademskih in administrativnih enotah in višjim vodstvom.

Ti dve težavi pogosto privedeta do tega, da institucije ubirajo ozko usmerjen ali kratkoročen pristop do internacionalizacije, kar privede do izgubljenih priložnosti, podvajanja dela, dragih napak in drugih pomanjkljivosti upravljanja.

Cilji projekta so:

- **CILJ 1:** ozaveščanje in krepitev sposobnosti višjega vodstva, akademskega in administrativnega osebja, da razumejo pomen internacionalizacije, z uporabo podatkov kot skupen način ocenjevanja uspešnosti.
- **CILJ 2:** načrtovanje, testiranje in uvedba orodja za skupno zbiranje in uporabo podatkov za dejavnosti internacionalizacije visokošolskih ustanov. Natančneje, ustvariti dostopno, uporabniku prijazno orodje, ki bo okrepi institucionalno razumevanje mnogih učinkov internacionalizacije preko vseh raznolikih med seboj povezanih dejavnosti na visokošolski ustanovi.

To poročilo je del prve faze projekta, v okviru katerega bo ekipa oblikovala odprto dostopno orodje za podporo internacionalizacije visokošolskih ustanov in modul za usposabljanje o temah kot so podatki in odločanje za internacionalizacijo.

Z namenom, da bi to naredili, je bil prvi korak sestavljen iz pregleda literature o omenjenih temah ([Output 1 poročilo](#)) in analize praks upravljanja s podatki in odločanja v procesu internacionalizacije treh projektnih partnerjev v obliki študij primerov (ta dokument).

Naslednja aktivnost projekta bo sestavljena iz analize rezultatov spletne ankete evropskih visokošolskih ustanov z namenom mapiranja in razumevanja njihovih dojemanj in praks internacionalizacijskega upravljanja podatkov in testiranje testne verzije predlaganega orodja.

V procesu izdelave programskega orodja in modula za usposabljanje bo več verzij, ki bodo nadgrajevane in rafinirane z rednim posvetovanjem in povratnimi informacijami notranjih in zunanjih interesnih skupin na delavnicah in neformalnimi povratnimi informacijami.



## METODOLOGIJA

Namen tega poročila je zagotoviti podrobnejši pogled na trenutno razpoložljivost internacionalizacijskih podatkov, prakse upravljanja podatkov, kateri podatki in kazalniki se štejejo za pomembne ali koristne in kako in če se strateške internacionalizacijske odločitve delajo z uporabo teh podatkov v treh evropskih visokošolskih ustanovah.

Proces je vključeval naslednje korake:

### ***Teoretična raziskava***

Vsaka univerza je izbrala skupino 30 internacionalizacijskih kazalnikov s seznama 489 kazalnikov iz orodja IMPI, ki so bili primerni ali pomembni za institucijo in skozi teoretično raziskavo za vsak posamezen kazalnik ali skupino kazalnikov izvedeli:

- kako se podatki za ta kazalnik zbirani na instituciji
- kdo zbira podatke za ta kazalnik
- kako pogosto se podatki zbirajo ali poročajo
- kdo uporablja te podatke ali kazalnik in kako?
- ali obstajajo kakršnikoli sistemi za zagotavljanje kakovosti podatkov ali sistemi za upravljanje s podatki ali pisna navodila s postopki?

### ***Fokusne skupine***

Vsaka univerza je organizirala eno ali več fokusnih skupin z ustreznim osebjem, fakulteto ali drugimi zainteresiranimi stranmi v svoji instituciji z namenom nadaljnega preučevanja, kako so internacionalizacijski podatki trenutno upravljeni.

Fokusne skupine so pomagale pri izmenjavi informacij med projektno skupino in ustreznim osebjem na vsaki univerzi, in iskanju dejstev ali zanimivih praks, ki niso razvidne iz tistega, kar je na voljo v spletnih ali tiskanih virih.

V fokusnih skupinah so projektni moderatorji predstavil tri glavne teme projekta, in sicer: internacionalizacija, upravljanje s podatki in sprejemanje odločitev, ter pozvali udeležence, da delijo svoje poglede na te teme z uporabo vnaprej dogovorjenih kratkih vprašanj.

Splošni cilji teh fokusnih skupin so bili:

- Identificirati obstoječe prednosti, najboljše prakse in področja za izboljšave na vsaki univerzi
- Začeti pregled IT ali drugih vrst vrzeli v upravljanju internacionalizacijskih podatkov, ter jih začeti zapolnjevati v sodelovanju z osebjem
- Spodbujati komunikacijo med oddelki in med fakulteto in administracijo v času aktivnosti
- Raziskati ideje udeležencev o tem, kako narediti podatkovne zahteve, zbiranje podatkov in poročanje o internacionalizaciji bolj učinkovito.



Moderatorji so zabeležili razprave in nato iz odgovorov udeležencev ugotovili in opredelili:

- institucionalne internacionalizacijske namene in cilje in kako jih razume različno osebje na univerzi
- trenutne tehnologije / orodja za upravljanje podatkov in kako vključujejo (ali ne vključujejo) internacionalizacijske podatke, ter kako bi se jih lahko optimiziralo
- vrzeli, priložnosti, in na zelo splošni ravni, institucionalno sposobnost zbiranja in upravljanja podatkov in odločanja, na osnovi mnenj udeležencev
- sredstva potrebna za vzpostavitev stanja za katerega udeleženci menijo, da predstavlja uporaben sistem ali politike upravljanja internacionalizacijskih podatkov.

Nekaj vprašanj, ki so jih moderatorji uporabili v razpravah z udeleženci na vsaki univerzi:

- Ali naši sedanji sistemi beležijo internacionalizacijske podatke v daljšem časovnem obdobju? (študentski informacijski sistem, kadrovski sistemi, finančni sistemi, itd)
- Kako lahko ali težko je zbrati in pridobiti zanesljivo poročilo o mednarodnih aktivnostih in dimenzijah univerze?
- Ali imamo strategije za zagotavljanje, da so naši internacionalizacijski podatki celoviti, konsistentni, dostopni, natančni?
- Kako lahko spremenimo izobraževalne ali organizacijske podatke v informacije s katerimi lahko izboljšamo rezultate internacionalizacije?
- Ali obstajajo izboljšave, ki bi jih lahko uvedli na naši univerzi?

Vsaka univerza je povabila zainteresirane strani iz naslednjih skupin, da se udeležijo fokusnih skupin. Tisti, ki se niso mogli udeležiti aktivnosti so bili prošeni, da podajo povratne informacije v obliki intervjujev ena na ena ali neformalnih povratnih informacij.

- Osebje odgovorno za informacijske tehnologije, upravljanje s podatki
- Osebje iz mednarodnega urada
- Podiplomski in dodiplomski akademski koordinatorji in administrativno podporno osebje
- Osebje iz administrativnih enot na univerzi (kadrovski viri, finance, alumni, kariera, itd)

### **Intervjuji**

Vsaka univerza je izvedla nekaj intervjujev z višjimi menedžerji na univerzah, da bi ugotovili, katera strateška področja in teme se zdijo menedžerjem pomembna za internacionalizacijo in ali podpirajo uporabo podatkov in jim to predstavlja prednostno nalogo. Glavna vprašanja o katerih se je razpravljalo na posameznem razgovoru so vključena v vsako študijo primera posebej ali v celoti za vsako institucijo.



## ZAKLJUČEK

S pripravo treh študij primerov so naše institucije uspele ugotoviti, kakšni so bili različni načini razumevanja internacionalizacije prisotni na različnih ravneh in enotah institucij in v kolikšni meri uporaba podatkov velja za koristen mehanizem za napredovanje internacionalizacije na tistih področjih, ki so veljala kot najbolj pomembno za institucije.

V nadaljevanju smo povzeli nekatere skupne značilnosti, ki smo jih prepoznali pri primerjavi treh študij primerov:

- Koç University in ISSBS trenutno nimata formalne strategije internacionalizacije, ker sta še obe instituciji mladi, vendar imata jasne gonilnike za specifične razsežnosti internacionalizacije, kot so ohranjanje ali povečevanje števila mednarodnih akreditacij za svoje akademske programe. V obeh institucijah se predpostavlja, da je internacionalizacija implicitno transverzalna dejavnost, vendar ni vezana na posamezne gonilnike, namene in cilje. Obstaja samo jasno zavedanje, kateri mehanizmi pomagajo doseči internacionalizacijo v zavodu (mobilnost, partnerstva, individualno sodelovanje akademikov, akreditacije, mednarodni študenti, osebje in študenti iz tujine).
- UAB ima strategijo internacionalizacije in je že dosegla potrebno število akreditacij. Eden od ključnih gonilnikov je pozicioniranje univerze na mednarodno priznanih lestvicah. Za nekatere vodilne menedžerje je to povezano s sposobnostjo privabljanja mednarodnega talenta.
- V vseh treh študijah primerov so vodilni menedžerji in zaposleni prepoznali svoj akademski in študentski informacijski sistem, kot dobro strukturiran in zanesljiv vir informacij. Vendar nobena od institucij ne uporablja teh podatkovnih zbirk za nič drugega, kot zgolj za potrebe poročanja, ki jih zahtevajo kriteriji nacionalnega vladnega financiranja (za UAB) ali akreditacijski organi (za KU in ISSBS).
- Glavna težava ugotovljena v vseh treh primerih je bila nepovezanost med večjimi uveljavljenimi sistemi za upravljanje podatkov v institucijah (za človeške vire, finance, akademsko načrtovanje, podatkov o študentih), in tistimi sistemi, ki zajemajo manjše podatkovne nize, povezane z mednarodnimi dejavnostmi fakultete, mednarodno mobilnostjo študentov, sledenjem raziskovalnim in izobraževalnim projektom, sodelovanjem med univerzami in industrijo, alumni in drugim. To pomeni, da se podatki, zbrani in upravljani znotraj teh manjših sistemov (pogosto s strani posameznikov ali majhnih skupin v ločenih enotah na instituciji), zaznavajo kot manj zanesljivi. To je tudi ustrezno dejstvu, da je večina podatkov in kazalnikov, ki so v teh manjših podatkovnih zbirkah neobveznih, zato se pogostost, s katero se zbirajo in posodablajo zelo razlikuje.
- Na vseh treh institucijah se skoraj vsi podatki in kazalniki, ki se smatrajo za pomembne za merjenje in sledenje internacionalizacije že zbirajo, vendar so bili na voljo le na zahtevo, ko jih je potreboval vodja mednarodnega urada ali druge akademske enote za akreditacije ali uvrščanje na lestvice (rankings).



- Kot javno financirana institucija je UAB imela potrebo, da vzpostavi poseben urad za centralizacijo upravljanja in zbiranja podatkov. O uvedbi takega procesa razmišljajo tudi na KU, saj se bodo med rastjo institucije do najvišje možne zmogljivosti v naslednjih 10 letih, pokazale zmogljivosti in vrzeli v upravljanju podatkov.
- V vseh treh institucijah je bilo tudi mnenje, da je, ko gre za internacionalizacijo raziskovanja in poučevanja, nekaj lažje doseči na individualni ravni ključnega raziskovalnega in akademskega osebja z njihovim sodelovanjem v profesionalnih omrežjih in s kolegi iz tujine, kot pa z "od zgoraj navzdol" ali centralno vodenimi dejavnostmi bodisi mednarodnega urada ali drugih centralnih enot.
- V fokusnih skupinah na KU in UAB je bilo zaznati težnje administrativnega osebja, ki ne dela neposredno za mednarodni urad za poenostavitev internacionalizacije na ponudbo akademskih programov v tujem jeziku ali poučevanje tujih jezikov.
- Po tem, ko smo na vsaki instituciji opravili nalogo izbiranja indikatorjev in uskladitev le teh z internacionalizacijskimi prioritetami ali strategijami smo prepoznali naslednje izzive:
  - o Izboljšanje kvantitativnih in kvalitativnih praks zbiranja podatkov institucij – se uporabljajo podatki pravočasno pri odločanju, ali večinoma za poročanje, ko je za kakršne koli korektivne ukrepe prepozno?
  - o Prepričati vodilne kadre o vrednosti uporabe internacionalizacijskih podatkov za akreditacije, obvezno poročanje, uvrščanje na lestvice (rankings) in druge namene
  - o razmišljanje izven ustaljenih okvirov, o tem, kaj bi lahko storili s podatki povezanimi z internacionalizacijo, ki so že na voljo v instituciji
  - o Potreba po večji povezanosti med zahtevki za podatke s strani nacionalnih ali regionalnih oblasti, in zahtevki, ki se smatrajo za pomembne na institucionalni ravni
  - o Potreba po mehanizmu za preverjanje veljavnosti podatkov za kvalitativne informacije
  - o Če obstaja strategija internacionalizacije: kako lahko doseže in vključuje ali motivira vse ravni institucije, vključno s posameznimi akademiki

Na fokusnih skupinah s predstavniki španskih univerz so bila predstavljena uporabna spoznanja in priporočila v zvezi z oblikami usposabljanja in načeli, ki bi lahko koristila večini institucij v njihovem nacionalnem okviru:

- Zavedanje in razumevanje upravnega in akademskega osebja, kaj je zahtevano, da je potrebno poročati ali prešteti in zakaj
- Vključevanje informacij o tehnikah ali mehanizmih za preverjanje veljavnosti podatkov, ki se nanašajo na kazalnik: na uradu kjer pridobivajo podatke in na uradu za centralno upravljanje podatkov (če obstaja)



- UAB je uvedla tečaj usposabljanja o internacionalizaciji za svoje administrativno osebje, ki se je izkazal za uspešnega pri ustvarjanju občutka pripadnosti in smisla med osebjem, ki se sicer samo ne bi prepoznalo kot "agenti" internacionalizacije na instituciji. Ta vrsta osnovnega uvodnega usposabljanja se lahko razširi tudi na akademsko osebje in raziskovalce na instituciji.
- Obstaja velika potreba, da imamo in uporabljamo kazalnike povezane s financiranjem ali porabo proračuna za dejavnosti internacionalizacije in kako se sprejemajo odločitve o tem, katerim vidikom dati prednost (npr. mobilnost proti zaposlovanju)
- Transparentnost podatkov: vsi ti podatki bi morali biti dostopni vsakomur na instituciji, predvsem akademikom, za dostop do podatkov je bila predlagana spletna platforma, ki bi bila dobra izbira za zagotovitev kar največje dostopnosti
- Potrebno se je zavedati, da včasih objavljanje podatkov, ki omogočajo primerjavo različnih akademskih enot (npr. univerz, fakultet, šol) ni priporočljivo.

#### **Priloge – študije primerov:**

- CASE STUDY 1 – KOÇ UNIVERSITY (KU), Turkey
- CASE STUDY 2 – INTERNATIONAL SCHOOL OF SOCIAL AND BUSINESS STUDIES (ISSBS), Slovenia
- CASE STUDY 3 – UNIVERSIDAD AUTONOMA DE BARCELONA (UAB), Spain

KONEC POROČILA



## Annex I – Institutional case studies

### CASE STUDY 1 – KOÇ UNIVERSITY (KU), Turkey

#### About Koç University

Koç University was founded in 1993 as a non-profit private university in Istanbul, Turkey and is supported by the resources of the internationally renowned Vehbi Koç Foundation.

Its mission is to “*be a center of excellence, one that succeeds in providing a world-class education to its students, creating new knowledge via the research of its faculty, applying the acquired knowledge for the benefit of society, and equipping its students with the highest sense of ethics, social responsibility and good citizenship*”.

In the context of most Turkish Higher Education institutions it is a small university with 6708 students (80% undergraduate and 20% graduate), 480 Faculty Members (not including instructors) and 10,000+ alumni. Also it was one of the first institutions in the country to offer all its academic programs in English from its establishment.

There are 22 undergraduate academic programs offered through 7 Colleges and 75 graduate research and professional programs including 25 doctoral programs offered through 4 Graduate Schools. The university has 4 campus locations across Istanbul and the main campus offers a residential campus experience for domestic and international students and faculty.

The undergraduate programs are structured under a liberal arts curriculum and offer a student to faculty ratio of 12:1. The university today attracts top-tier students (the majority of undergraduate students come from the top 5% scorers in the national university entrance exam) and faculty members. At graduate level the proportion of international students reached 25% in 2015.

Administrative operations are carried out by over 400 staff members across 15 administrative directorates. Amongst these is the Office of International Programs under the Dean of Students directorate. This is the central unit that coordinates internationalization activities at the university and works in collaboration with other units such as the Colleges, Graduate Schools, Research Directorate, Registrar's Office, Campus Management and other to achieve the institution's internationalization goals.

As a comprehensive and research intensive university the number of publications and externally funded projects per faculty member is amongst the highest for Turkish universities and in the MENA region. To give an indicator of research impact Koç University currently holds 8 of the 15 active European Research Council (ERC)





grants awarded in Turkey. These projects are delivered at the 100+ research laboratories, centers and forums the university has established, many in cooperation with industrial and government sponsors.

## **Internationalisation activities and dimensions of Koç University**

International student mobility programs were established at the university in 1997 a few years after the relocation of the university to its main campus in Rumelifeneri.

Today approximately 300 Koç University students go on a semester of study abroad at one of the 200+ institutions that have established cooperation agreements with the university.

A growing number of students are also choosing to spend time abroad doing international internships, summer schools or service learning and volunteering activities as part of student led groups and associations.

The university developed in the past five years numerous individual co-tutelle PhD agreements with universities in Europe and the US and to date has received approval from the Turkish Higher Education Council for 2 double degree Master's programs (all in Social Sciences and Business).

Most Koç graduates have demonstrated success in finding employment at top international and local firms. Over one-third of KU alumni enroll in graduate programs at top academic institutions outside Turkey after graduation.

Each semester the university welcomes over 100 incoming exchange students which amounts to almost 500 international students on campus when one includes full time international students.

The university has gone through a dramatic increase in all numbers of international students (except for exchange students as there is a limit set by partnership agreement quotas) in the last 3 years. There is also a growing community on campus of international faculty (25% of faculty body) and administrative staff and visiting faculty members and guest speakers each semester.

Due to this growth in 2015 the university opened a new International Community Office to provide dedicated migration, orientation and integration services for this group.

Besides full time study or semester exchange there are opportunities for international students of all levels (high school, undergraduate, graduate) to study, work or do research at the university through summer schools, short term research, teaching or academic programs and internships organized by different units (Academic Affairs, General Secretary, Research Centers, International Office, Research and Development Directorate)



Several of the university's programs and graduate schools have become internationally accredited, or joined strategic partnerships and memberships to international associations to further its academic or research goals. Koç is increasingly compliant with the Bologna Process. The Diploma Supplement (DS) Label has been delivered to all Koç University graduates since 2011 automatically and free of charge and course information and credits are awarded in line with Bologna Process requirements.

Faculty members with research appointments take advantage of the university's Visiting Scholar Program to work abroad for periods of time or to extend invitations to scholars working at international universities to participate in the program and establish the foundations for research-oriented and long-lasting partnerships.

There is also an increasing international presence of the university at conferences, fairs and other events that are attended by the Office of International Programs as well as academic units and faculty members that help to raise the visibility of the institution abroad.

Koç University has become one of the leading universities in Turkey and is now ranked among the top worldwide, top 100-under-50, Asian universities and "best small universities" rankings produced by Times Higher Education (THE).

### **Strategic aims for internationalization at Koç University**

In 2015 there is still no single strategy for internationalization at the university or at College or Graduate School level. A comprehensive internationalization strategy is in the process of development and to be launched in late 2016 with input from all relevant academic and administrative units. Students will also be involved in providing feedback at the end of the strategy development process. However, there are some clear strategic aims for internationalization that the university's senior management team have publicly stated in open meetings and documents. These are as follows:

- Increase the number of joint and double degree programs at graduate level (MSc and PhD)
- Increase the number and diversity of graduate international students particularly for PhD program
- Increase share of EU and other international funding grants obtained for research
- Obtain new international accreditations for Business and Engineering programs
- Increase the proportion of students that participate in international mobility to 5% per year and in the mid-term to 10%
- Support and contribute to the visibility and brand of Turkish Higher Education abroad



## How were the 30 IMPI internationalization indicators selected at Koç University

The project team organized 3 focus group sessions in which a total of 40 administrative staff from relevant units participated. They were asked to select from the list of top 100 IMPI internationalization indicators those that they consider were useful and relevant to their work areas and to describe in which ways are these collected, good practices and areas for improvement. The discussion also included considerations about to what extent did staff consider Koç an international university and why, and what specific data management skills they considered needed development from an individual perspective.

The academic and administrative directors who are part of the university's general coordination committee were also presented with the project information during a scheduled meeting and asked to indicate from the list of top 100 IMPI indicators which ones they considered relevant to their unit's strategic aims. A total of 10 responses were received from this exercise and follow up unstructured interviews were conducted with 5 of the university's senior managers.

Focus group participants and interviewees were also asked to suggest additional indicators not on the list that would be useful. A total of 36 indicators were selected from the following internationalization dimensions:

- Research: 7
- Teaching and Learning: 11
- Resources and visibility: 9
- Campus and Services: 6
- Alumni: 3

To see the list of indicators selected by Koç University please see **Annex I**.

## Results of the desk research at Koç University

In order to assess where and how is internationalization data collected and used at the institution the following sources were reviewed as part of the desk research exercise:

- 2014 Overseers' Report
- Office of International Programs internal presentations and annual report
- University website (main website and college/graduate school websites) where the institution's mission and vision are stated as well as other key internationalization aspects of the institution



- 2014 and 2015 President's staff meeting presentation

From the review the following were considered main findings:

The Office of International Programs is tasked with collecting and reporting data on internationalization aspects related to international partnerships, mobility of students, mobility of faculty and staff (if funded through the Erasmus+ grants program) and participation of Koç and international students in ad-hoc programs. The International Community Office collects data related to the international community on campus with support from the Human Resources directorate.

Most of the internationalization data corresponding to internationalization of the curriculum, international student admissions, intercultural skills development, international career opportunities, international alumni community, international research activities and impact are collected in a decentralized way by the Colleges, Graduate Schools and associated administrative units such as Careers Office, Alumni Office, Research support directorate, Academic Affairs, Registrar's Office and others.

The frequency of collection of this data can be best described ad-hoc as it depends entirely on whether it is a compulsory reporting requirement for the Turkish Higher Education Council or for accreditation processes every 2-3 years or if the data is an optional requirement for internal reports such as the annual "Overseers' Report" to the university's Board of Trustees or others related to financial reporting or updating marketing materials such as the university website and digital or printed brochures.

There is no accessible data internally on how budgets are allocated to different aspects of internationalization and from the interviews and workshops conducted in preparation for this case study it was also evident that there is not a strong culture of sharing information across academic and administrative units on internationalization in a formal way or as agreed per formal procedures. Any sharing and use of internationalization data and information is mostly done on a case by case basis as the need arises for different purposes.

### Focus group findings at Koç University

There were a total of 3 focus group sessions with representatives from the following units or types of stakeholders at the university:

- Administrative support units: careers office, human resources, alumni office, registrars' office, finance, information and technology, facilities management and others
- Academic administration units: undergraduate and graduate programs academic and administrative coordinators
- International office unit: partnerships, exchange, projects and international community unit staff



The focus groups aimed to provide an understanding of how different groups perceive internationalization at the institution, their role in advancing internationalization processes or outcomes and the types of data and indicators they are directly responsible for managing, their uses and to what extent they consider this information to be valuable for their overall work functions.

Key findings included:

- Difference in the level of awareness between types of staff
- Most Academic Administration staff considered we are international, in contrast to International Office staff and faculty members
- Most examples of indicators related to: language of instruction, international academic staff and students
- Low awareness of other indicators such as international partnerships, accreditations, revenue, spending and alumni
- Uneven awareness of what systems and reporting tools are currently in place to collect and search for internationalization data in different areas.
- No clear relationship between the reporting of this data on an annual basis and the work plans or strategies that are then agreed with senior management for the following year. For example, there are no set targets or objectives to increase internationalization specific work outcomes.
- Uneven data across academic departments in terms of frequency and format for some indicators (eg number of co-tutelle supervision agreements not existing in some departments)
- There was low awareness about the internationalization data that was being collected by the International Office and its reporting
- Key individuals at Registrars Office, Vice-President for Academic Affairs and Vice-President for Research and Development were identified as data “hubs” for:
  - Data that is currently being collected for external reporting purposes (eg number of international students enrolled each year for the Turkish Higher Education Council)
  - Data that is currently being collected for internal reporting purposes (eg amount of scholarship given for international activities of researchers).
  - Data related to numbers of international students, staff and academics is captured and managed using existing database systems such as KUSIS (student and curriculum PeopleSoft system), SAP (human resources and budget system Oracle) and International Office internal excel tracking sheets.

The Office of International Program did not have full access to the information about exchange students and staff and was not aware of existing database queries to



access this data. The main student information system (KUSIS) was rolled out late in 2014 so this might explain to some extent that it is still in the process of being adopted fully by all units.

- Data related to international activities of faculty members is not collected because it would represent more information to report on annually
- International activities organized on campus could be incorporated into the faculty information system (KUFIS) but it would fall on the Colleges' administrative staff to monitor and report on this activity.
- There is no uniform format for the reporting process that could help compare performance year on year or between colleges or graduate schools.
- Data collected by the Office of Research and Development is mostly used for external reporting to project funders but it was recognised that having more units such as Communications and International Office have access to this could be useful in raising the profile of the university for national and international research collaborations.

## Interview findings with senior management at Koç University

The team conducted 5 short follow up interviews with faculty members with management roles from the undergraduate colleges and graduate schools. The main purpose of the interviews was to get a sense of which data they consider to be useful for their work in deciding priorities, budgeting and other managerial decisions. Both academic and research senior managers agreed that data related to internationalization of research, learning, teaching and our alumni community would be relevant and useful.

Key findings include:

- Need for better collection and access to internationalization data is recognised as important for visibility, accreditation and graduate recruitment
- For some senior managers in non-academic work units (eg Finance, HR, Campus Facilities management, Library) it was not clear how their units' contribute to internationalization and that even if there was more or accessible data it would not make a significant difference in their decision making
- International alumni emerged as an area lacking data and was considered important for the next 10 years as development plans start to link with our alumni strategy
- There would be natural resistance from faculty members to add more things to report as their focus is on research. This is linked with an absence of incentives for international engagement of faculty



- There was a strong sense from interviewees that one of the defining cultural aspects of the organization is the principle of “hiring the best faculty and staff, recruiting the best students and then letting them be free to innovate and create”. In practice this translates to an agility to make decisions at the key levels (Colleges, Graduate Schools) compared to larger, older more bureaucratic higher education institutions in Turkey but, it also highlighted the difficulties in evaluating performance in an objective way when it comes to internationalization.

## Recommendations and best practices from Koç University

### Challenges

- There is no declaration on where the university is headed in terms of internationalization. The absence of an institutional strategy makes it harder for each unit/faculty to set targets in line with identified goals. Thus, this leads to uncoordinated actions, and sometimes no actions are taken since internationalization is not seen as a departmental/institutional priority.
- Lack of an Advisory Board or Senior management position tasked with internationalization and faculty champions make it harder to move beyond Traditional Internationalization and involving faculty members into the internationalization process.
- Even though KU has a central office for international initiatives, there is no central information sharing system on the various international activities that are being carried out or planned by different units/faculties/people, which prevents different units to create synergies and collaboration in common goals.

### Good practices

- Research related data is currently tracked and monitored regularly because of external reporting requirements
- Student and staff related data is also tracked due to national reporting requirements but not its internationalization dimensions
- There will be a full integration of all database systems with the KUSIS (PeopleSoft) in the next two years allowing for better access to data for all units
- International office has begun tracking data beyond numbers to include satisfaction levels of students on mobility programs
- Promotional materials produced in 2014-15 have included more indicators related to internationalization for both Turkish and international audiences



- Annual General meeting presentations to staff and faculty members include strategic aims of internationalization

### **Recommendations – areas for development/training**

- Having a specific “Internationalization” section of the annual Overseer’s report and ideally developing an “Internationalization strategy” that collates all the different unit’s internationalization activities, expectations, outcomes, challenges and making this information accessible to all
- Increasing the frequency and coverage of training on the existing database and CRM systems for all staff (newcomers, existing staff)
- Database management as a specific area for training
- More awareness of how rankings, external reporting and accreditation processes work to understand one’s work contribution to these for internationalization





## CASE STUDY 2 – INTERNATIONAL SCHOOL OF SOCIAL AND BUSINESS STUDIES (ISSBS), Slovenia

### About ISSBS

ISSBS is a flexible and relative small higher education institution in the north-eastern part of Slovenia specialized in the field of business and social studies at bachelors, masters and PhD levels, with a focus on social responsibility.

It was founded in 2006 in Celje as an independent, private higher education institution. It develops and implements curricula in the fields of economics, business and administrative sciences at all three levels of the study (bachelor, masters and doctoral). It is also active in related fields of the research and international cooperation. All six study programmes were developed in accordance with the Bologna guidelines and accredited in Slovenia. Master's programme Knowledge Management is also internationally accredited by the German Accreditation Agency FIBAA.

ISSBS curriculum stresses the importance of practical training and students' projects with industry. Experts from business sector are regularly involved in the programme delivery, and thereby the exchange of theory and practice is facilitated. ISSBS has signed cooperation agreements with many regional companies and other organizations. It organizes at least three round tables annually related to the educational leadership processes and relevant social and business topics, as well as a series of diplomatic evenings, which are designed for both, students and general public. Moreover, meetings with employers, counsellors in secondary schools and employment agencies are being held regularly in order to keep all stakeholders involved into the study processes. Innovations, responsiveness and adaptability to new trends are the specific advantages of the ISSBS.

Internationalization is an important ISSBS focus, which is not implemented only through the mobility of students, faculty and other staff, but also through the implementation of international summer schools and direct involvement of foreign experts and professors in the delivery of the courses. In addition, ISSBS is the member of many international and regional organizations (EAIE, UNAI, Danube Excellence Consortium, Regional Chamber of Commerce Celje). Moreover, ISSBS cooperates with more than 30 European universities.

The research activity is strongly developed at the institution. ISSBS implements national research projects acquired through public tenders by Slovenian Research Agency (SRA), as well as in other tenders financed by the European Structural Funds, ministries or municipalities. ISSBS also successfully conducts international research projects (7th Framework Programme, the EACEA Tempus IV, EACEA Lifelong Learning Programme (EQF, Jean Monnet, Leonardo da Vinci).

Apart from it, ISSBS has been awarded the international HR Excellence in Research recognition. It became one of the national contact points Euraxess as well. Institution annually implements the international scientific conference MakeLearn, various research seminars, and Student Research Conference KoMe.



An important part of the support infrastructure to the research activities at ISSBS is also the Publishing House, which issues teaching materials for students, scientific publications such as monographs, and international scientific journal The International Journal of Management, Knowledge and Learning (ISSN 2232-5107). It is also a co-founder of the international academic publishing house ToKnowPress together with Kasetsart University, Thailand and Maria Curie-Skłodowska University, Poland.

### ***Academic activities:***

- Accreditation/re-accreditation of 6 study programmes (two first-cycle, three second-cycle and one third-cycle programme).
- Increase in the number of students from 2007/2008 to 2014/2015 to around 500, annual enrolment of new/first-time enrolled students on the first cycle is around 80, on the second cycle is around 75.
- Total of 496 graduates from 2007/2008 to 2013/2014, a gradual increase and stabilisation at more than 150 graduates a year.
- Gradual increase in international Mobility activities for students and administrative and academic staff (Erasmus, work placements and study visits from 2007/2008 to 2013/2014).

### ***Research activities:***

- Increase in the volume of R&D activities in the period of 7 academic years from 2007/2008 to 2013/2014 (39 projects selected from 2008 to 2014; researchers in FTE by year from 2009 to 2014 onwards: 1.85, 4.25, 4.51, 7.44, 7.48, 11.44; share of ISSBS's total annual income resulting from research activities, 2010-2014: 6.5%, 11.9%, 24.8%, 15.6%, 29.8%).
- The research group of ISSBS consists of 19 researchers and three professional/technical staff.

### ***Co-operation with the environment and social responsibility:***

- International recognition of MakeLearn international scientific conference.
- Establishment of international scientific publisher ToKnowPress.
- Increase in the volume of activities and the number of participants in ISSBS's international events, summer school (5 summer schools, 99 participants), seminars/workshops for doctoral students 2011-2014 (three workshops, 88 participants), inclusion of foreign guests (35 foreign lecturers/researchers), applications for and implementation of R&D projects, etc. (2008-2010, 55 project applications, 13 projects selected; 2011, 20 applications, 7 selected; 2012, 27 applications, 5 selected; 2013, 25 applications, 8 selected; 2014, 18 applications, 6 selected).

### ***Ensuring operating conditions:***

- In the 2014/2015 academic year there were 17 employed higher education teachers, higher education staff and researchers (HET/HES/researchers), 26



contractual HET/HES/experts from the field, as well as 14 non-teaching staff (management and administrative staff).

- In the 2013/2014 academic year, the ISSBS library gained 708 units of material, taking the total number of material units to 3,477. Students and teachers have remote access to journals and electronic books by Emerald Group Publishing Ltd, ProQuest databases and SpringerLink.
- Established system of quality assurance (Quality Assurance Handbook, Plan for Quality Assurance Processes, Indicators).
- National re-accreditation in 2013 for seven years (SQAA).
- FIBAA professional accreditation of the second-cycle programme Knowledge Management (2010, valid until 2016).
- International accreditation of first cycle study programme Business in Contemporary Society and the second-cycle study programme Knowledge Management (2014).

## How were the 30 IMPI indicators selected at ISSBS

The team selected 25 indicators (5 from each IMPI group - indicators of the year), which are important for ISSBS (see **Annex I**). The methodology of selection was as follows: Firstly, the team informed ISSBS co-workers about HEIDA project and case study. The schedule and methodology of data gathering was presented. Due to desk research, the decision was made that the best way of selecting the indicators is by survey. Secondly, the team designed an online survey, for the ISSBS co-workers to select 5 indicators among each IMPI group. They choose which indicator is relevant for internationalization strategy at ISSBS<sup>1</sup>.

Thirdly, chosen indicators were then sent to the ISSBS international office. At the international office, they answered questions for 25 selected indicators and their respective data management practices.

## Results of the desk research at ISSBS

For the purpose of the desk research the team reviewed the following sources related to internationalization data at the institution:

- 2014-2018 ISSBS development strategy,
- self-evaluation reports,
- overview of available international data.

ISSBS does not have an independent strategy for internationalization. ISSBS has designed a Development Strategy in which internationalization indicators are integrated as well as quality indicators.

This way of defining internationalization is a management decision based on fundamental characteristics of the institution, namely its size and age. The

<sup>1</sup> 15 persons (9 teachers, 3 management staff and 3 administrative staff) conducted the survey.



Development Strategy has been designed by taking into consideration all fundamental documents, amongst these documents, it is necessary to particularly highlight the mission and vision as well as the Self-evaluation report (SER) and recommendations from external evaluations and reaccreditations (national and international).

Key findings from reviewing these sources include:

- Internationalization is cited as a transversal activity in the four core activities of the institution, namely: education, research, collaboration with the environment and social responsibility and ensuring operating conditions at ISSBS.
- A mix of central and faculty/department level offices carry out the main function of coordinating international activities, dimensions and processes at ISSBS. Therefore, it is sometimes hard to keep the track on all the internationalization data that are collected and where (faculty/department offices) are available.
- Most admin and academic staff at our institution don't know where to find our internationalization data.
- Internationalization data is not always kept up to date.
- Internationalization data is not available in a format that is easy to query and extract for reporting.

Also after reviewing the proposed indicators the International Office at ISSBS provided the following feedback:

- The need for an independent International Strategy.
- The need to decentralize the entire internationalization activities.
- The need for a comprehensive data management system.
- Additional questions for each indicator are very useful.

## Focus group findings at ISSBS

The main topics of the focus group were internationalisation, data management and user skill needs. The group consisted of 2 administrators, 2 management staff and 2 teachers.

Key findings included:

- Institutional internationalisation goals and objectives are in line with the 25 selected indicators.
- ISSBS uses the Novis information system, which is integrated with data warehousing, for collecting HR and student data, but does not include data about finances, which are also important when assessing internationalization.
- For the administration, documentation, tracking, reporting and delivery of electronic educational technology courses, ISSBS uses the software application Moodle.



- There is some data collection (about students, HR, etc.) that is still done by hand (in excel sheets), which are not integrated in Novis.
- There was agreement in the need to upgrade existing information systems at the institution.
- There is no separate strategy (this strategy is currently work in progress) for ensuring that our internationalization data is complete, consistent, available, relevant, timely, and valid. There is no separate strategy for data aggregation and analysis overall.
- Currently, internationalization data is collected and analysed as a part of ISSBS development strategy and self-evaluation reports.

## Interview findings with senior management at ISSBS

The team conducted one interview with the institution's Vice-Dean as it was considered to be the key stakeholder for strategic and operational issues related to internationalization.

Key findings from the interview include:

- Internationalization data management is very complex, because all internationalization concepts have to be individualised for specific higher education institution need (in terms of age, research oriented vs teaching oriented, size, etc.) as well as for specific country or regional context and regulations.
- Understanding of Internationalization indicators (IMPI indicators) is biased and hard to understand/specify, because of cultural, national and organisational specifics.
- Management is not always keen on data collection efforts as it can be seen as unnecessary bureaucracy.

During the interview, some new questions arose that in his view should guide the internal efforts for any data collection activity:

- Do we have the ability to collect the data for calculating specific indicators?
- Do we collecting the data for specific indicators?
- Are we able to turn the collected data into useful information?
- How/for what is the information used for?

## Recommendations and best practices from ISSBS

### Recommendations

We could turn educational and organizational data into actionable information to improve internationalisation outcomes:

- with an independent International Strategy,
- with decentralization of the entire internationalization activities,



- with a comprehensive data management system,
- by using the international data and analysis for action/improvement,
- with extra training for administrative staff and management about data management.

## Good practices

At ISSBS the data warehouse was developed in a framework of a Quality assurance project, this data warehouse was then integrated with the existing information system (Novis). Managers and administrative staff unanimously acknowledge great improvements arising from this integration whilst also recognizing that it is a work in progress.

Every year, the institution prepares a self-evaluation (SE) report, which critically evaluates the operations of ISSBS in all areas, and based on its findings take any necessary measures for improvement. The latter are recorded in the Annual Work Programme and in the annual and long-term goals of ISSBS. For example, improvements indicated in the 2014 SE report, are particularly connected to strengthening co-operation with foreign and national higher education institutions, strengthening research activities with dissemination activities and publicity of the research work of ISSBS research group.

The ISSBS Development Strategy is based on the findings of international accreditations and evaluations which ISSBS has approached over previous years; in 2010 ISSBS received the FIBAA programme accreditation, in 2015 two programme accreditations from AQ Austria and the ASHE institutional evaluation is still underway. Most of the agreed actions going forward relate to improvement of teaching and learning activities at the institution and quality assurance processes. This focus on basic academic issues responds to the age and size of the institution but nonetheless also touch on some international aspects. For example, on the basis of FIBAA recommendations, ISSBS has agreed to further increase support of teaching in English, and establishing an international advisory board. On the basis of the AQ Austria and ASHE accreditations, ISSBS intends to strengthen activities relating to internationalisation.



## CASE STUDY 3 – UNIVERSIDAD AUTONOMA DE BARCELONA (UAB), Spain

### About UAB

The Universitat Autònoma de Barcelona (UAB) is a generalist campus-based University, hosting 43.000 students. The UAB plays a leading role in scientific research and the wide range of disciplines represented promotes a multidisciplinary approach.

The university was selected among the top five universities to be recognized as a Campus of International Excellence by the Spanish government in its first edition (2009). UAB holds a leading position in the most prestigious and influence international university rankings. In recent years, this award has been favoured by the growing impact of the research, the constant improvement of the quality of teaching and the ability to attract international talent. This progress has been decisive in going forward to leading positions among Spanish universities in the two main university rankings: the QS World University Ranking (second-ranked university in Spain according to the QS Ranking 2014/2015). The UAB is located at position 160 in the world ranking (and 60 in Europe) and the QS University Rankings: Top 50 Under 50 2014 (10th in the world, 2nd in Europe and 1st in Spain).

The UAB's commitment to internationalisation is reflected in its satellite office in Shanghai as well as agreements with many international universities facilitating exchanges and joint projects for students and researchers. Specific programs for international cooperation and study include Erasmus + and former Alfa, ERASMUS, ERASMUS IPs, Tempus, Asia Link, Erasmus-Mundus, Comenius, Leonardo da Vinci, and Erasmus Curriculum-Development. Specific international research programs include Integrated Projects, STREPS, Specific support measures, CRAFT, INCO, Marie Curie (European Reintegration Grants, Intra-European Fellowships, Conferences and Training Courses, Research Training Network Cosy). In addition, the UAB is a member of the following international networks: EUA, EAIE, ECIU, EMUNI and Alianza 4 Universidades.

The university, according to its internationalisation strategy has created two offices specialised in international projects support: the International Educational Projects Unit and the International Research Projects Unit. These offices provide centralised support to those scholars or administrative staff applying for European and other international projects in the preparation, implementation and justification of the projects.

### International dimensions at UAB

The Universitat Autònoma de Barcelona, in its mission, defines itself as a public Catalan university with an international outlook. For the university, internationalisation is one of the tools to achieve its objectives in offering quality education, research and knowledge transfer. The UAB's internationalisation strategy is based on three fundamental lines of action: mobility, collaboration and cooperation, and the attraction of talent. Mobility must give students, lecturers and administration staff the chance to work in prestigious universities mainly through exchange programmes.



Collaboration with other universities and institutions permit students and lecturers to discover and propose new teaching experiences and open new fields of research together with other prestigious universities. Cooperation with developing countries contributes to the construction of a more solidary university committed to social reality. Attraction of talent aims to select the best students, especially at the master's degree and PhD level, and attract the best lecturers from around the world.

To foster these objectives we place special importance on strategic alliances with other universities through a variety of consortiums and networks.

## How were the 30 IMPI indicators selected at UAB

At UAB the method for selecting the 30 indicators for use in the case study activity was to give priority to indicators derived from or mostly related to teaching activity.

The team took into consideration that in Spain and specifically in Catalonia there was an existing framework of internationalisation indicators that most higher education institutions participated in developing.

The indicators were produced in the framework of the activities of the “Map of internationalization indicators in the Catalonian Higher Education system” project, approved by the Inter-university Council of Catalunya<sup>2</sup>.

15 indicators were selected from the Catalonian framework and 15 from the IMPI list of “Indicators of the year” list (see **Annex I**).

## Results of the desk research at UAB

Analysing data derived from the desk research, the following aspects could be highlighted:

- For almost all the indicators data is collected through internal mechanisms only
- The data collection is both optional and compulsory. Data related to staff is mostly optional. Other indicators which are optional are for example: Networks and/or international associations to which UAB belongs, International students in undergraduate/master/PhD studies, Knowledge of foreign languages by Staff, Number of international teaching and research staff (foreign and on full-time contracts, or equivalent) working in the UAB, Academic staff mobility.
- Most of mandatory data is related to the: Staff (administrative & service) working on international relations full-time, International agreements signed by UAB, students in mobility, Students involved in internship stages abroad, for example.

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<sup>2</sup> Mapa d'Indicadors d'Internacionalització del Sistema Universitari Català, aprovat pel Consell Interuniversitari de Catalunya





- The main units responsible for data collection are the departments of Human resources for data related to staff and International Office for data related to students and projects
- The data is used mostly for administrative aspects, as for example payment of salaries, or for the reports university has to deliver to the external agency for quality assurance;
- In almost all the cases, information is used for statistical purposes
- In almost all cases the data is used by the International Relations Area
- There is missing data regarding the use of data collected, especially when data is not mandatory
- In all the cases data is collected through informatics tools, as described in the last part of this report.
- Most of the data is self- declared based by the staff and some of the data is objective.
- Regarding the IMPI indicators, almost all of them are mandatory and of their collection is responsible the OGID (Office for Data management) in collaboration with Human Resources or Area of International Affairs.

## Focus group findings at ISSBS

In order to reach information about internationalization in Catalan HE a focus-group was conducted, on 7<sup>th</sup> of September 2015.

Participants were academics involved in management activities at university and faculty level and administrative staff from international offices. The participants represented Catalan universities: from the metropolitan area and also from outside the metropolitan area as Girona and Tarragona. A technical university was also represented.

### **Participants' perception regarding the internationalization of teaching in Higher Education**

Participants agreed on different conceptions of internationalization in teaching. There are three positions: internationalization related to the teaching curriculum (content adaptation), language of teaching (English or other language different of Catalan or Spanish) and students' mobility.

Internationalization could be also analysed from individual and group (departmental or institutional) point of view. Participants agreed that in many cases, international dimension of teaching is depending especially on individuals, and institutional approach is sometimes limited. The individual level is easier to implement comparing to the group level which imply a more strategic approach.

Participants also mentioned that the purpose of the internationalization measures is recruitment of new students. Making university and study programmes more attractive for international students was considered one of the main objectives of the internationalization of HE. Also participants considered that in some cases adaptation to other language consisted only in translation of the teaching contents to other language and only in some cases involved a real transformation of teaching. This approach facilitate the incorporation of students and staff from abroad.



## **Perception on indicators and data collection.**

Participants agreed that the indicators are mainly quantitative and raised comments about the necessity to collect also qualitative data in order to ensure a holistic approach in this issue.

Academics considered that one of the aspects which could be improved consisted in the multiplication of courses delivered in English. Sometimes from administrative reasons and lack of interest for students, courses delivered in English are withdrawn from study plans. Also academics considered that teaching in English is an important aspect to consider but also the relevance of the content and the international dimension of teaching should be transversal to all levels and courses.

Participants considered that indicators should be distinguished between undergraduate studies, master and PhD studies according to their specificity. For example, at Master and PhD level there is more mobility at European and international level and the teaching routinely uses more international literature and courses.

Related to the indicators referring teaching and its content participants considered this is a complex issue, because when contents are defined the internationalization is not considered and always is related to the language of teaching despite this is not the only aspect defining internationalization.

Participants also highlighted that in almost all the cases internationalization addresses international students, but also local students should be considered. The internationalization of national students should be considered a priority. Both academics and administrative staff claimed the necessity to clarify the purpose of the internationalization indicators: if the internationalization addresses the international profile of students or their local profile. This duality should be balanced in order to make correct decisions. In this line, the incorporation of a more practical perspective is needed in order to ensure this national- international approach.

The use of the indicators and data collected through them were other topics of discussion. The use of data collected should be more visible. Some of participants asked for more visibility and rigor in the data collection process. Data is not always visible or accesible, used and transparent.

Quality assurance mechanisms are needed in order to monitor and audit the process of data collection. Some voices said that only data related to funding is verified, but more qualitative data is needed too.

Another topic of discussion was the coherence between the indicators proposed by each institution or association. Participants claimed that coherence is needed between indicators proposed by local and national bodies (as Catalanian government) and university level.

## **Characteristics of an international university, opportunities and barriers.**

According to participants, an international university should possess the following features:



- an international organizational culture is needed: internationalization should be generalised at all university levels and structures. The international dimension should be present and visible to all the actors involved.
- teaching content should be international: including international references in course content but also the development of international competences for staff. This dimension should be present in the “DNA” of each professor
- differentiating between general and professional universities: participants considered that professional degrees or study programs are more centred in the local context, meanwhile the general ones could be more connected to the international context.

In order to achieve these aims, universities should overcome some obstacles:

- universities should have a strong and clear internationalization strategy at all levels. In Catalan universities despite change coming slowly there has been steady progress in the last few years.
- universities should focus on long term changes, management teams should ensure the continuity in the strategies and measures they take.
- the use of data collected is required in order to make decisions based on evidence. Local government and institutions should ensure coherence in the data collected and use.

## Recommendations and best practices from UAB

Due to its dimension and the characteristics of its funding system the UAB has needed to organize the processing of all its data in a highly professional way. Thus, a specific unit devoted to the analysis and organisation of the data was created in 2003 being provided with a set of technicians' experts on processing data.

The first aim of this Office for the Management of the Information and Documentation (OGID) was to provide precise data about the UAB's main activities and core business to the Catalan Government, to be used to calculate the allocation of public funds to be received by the UAB. Consequently to this goal, the OGID has direct and permanent access to the 4 key processing systems that run the UAB:

- Sigma: Academic processing data. Sigma manages the full lifecycle of student records from their access to the University system till they obtain their degrees, including, as well, the possibility to transfer students or academic results to or from other institutions. In other words, Sigma manages and collects information about student results and qualifications, personal data of students, their previous academic background, and financial information associated to their student life (fees, scholarships and other grants). Concerning to international activity, Sigma also process information about exchange programmes (agreements signed by the UAB and incoming and outgoing students), and most of the study abroad programmes.
- Fenix: Research management data. Fenix is the tool used to process all the research and educational projects (currently Horizon 2020 and Erasmus+) in which the UAB professors and researchers take place.
- Hominis: Human resources management data. Hominis is the instrument for the management of the salaries and the processing of the data related to all the workers of the UAB, including teaching staff, researchers and



administrative and technician staff. It gathers both their personal data and the financial aspects related to their salaries.

- **Badus:** Repository of Personal data. Badus gathers personal data from all the people with any link with the UAB. It includes not only the students, staff, researchers formally working for the UAB but also other individuals with a temporary relation with the UAB. This point is especially indicated in order to identify international short time visitors to the UAB. However, as their registration is not compulsory, the collected data is not complete: only temporary visitors that need to obtain a visa permit previous to their arrival or other guests that wish to receive a concrete service from the UAB (such as access to Libraries, to Laboratories or to the Sports Center or Medical Services) ask for their registration.

The OGID, by means of its updated and direct access to all those data systems, can obtain a big amount of data about wide range of information and indicators. The OGID has the mission to process all this information to fulfil ordinary demands but it can also face a varied collection of demands.

However, not in all the cases the information facilitated by the OGID comes from the 4 key Processing Systems mentioned above. Only if the information comes from those sources its reliability and quality can be fully guaranteed. In other cases, information is elaborated by the specialised technicians of the OGID by using information obtained from other databases used at the UAB (internal databases maintained by unites or offices such as International Relations Office, School of Modern Languages, Communication Unit) or by making inferences from the data of the mentioned database.

As a result of that, despite there is a high variety and extension of the data available to be used, not in all the cases the quality of the data provided responds to the same standards of quality.

The UAB has the purpose of incorporating as many units, offices and processes as possible to the 4 Key Processing Systems, as a mean to ensure the quality and processing of all the data, but this is a long term project. Nevertheless, almost every year a new set of data is incorporated to the Key Processing systems: the last one addition to the Fenix Database has been the educational projects approved under the Erasmus+ that are now processed as any other research project.

The indicators selected as part of the HEIDA project are also now among the data managed by Fenix.