

Graduates data collection for analyses of the internal and external effectiveness of Italian Universities

Alberto Leone

Consorzio Interuniversitario AlmaLaurea

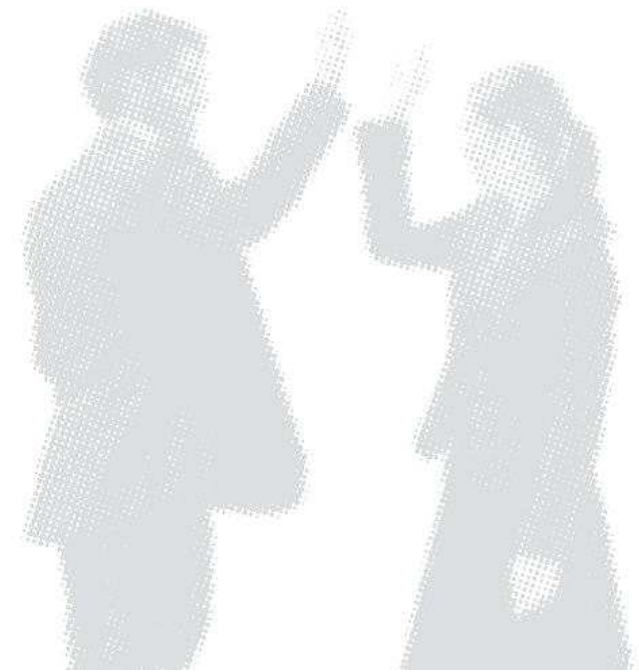
alberto.leone@almalaurea.it

<http://www.almalaurea.it>

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Summary

- ❑ Introduction
- ❑ The AlmaLaurea Consortium
- ❑ System Overview
- ❑ Facts
- ❑ Project extensions
- ❑ Conclusions



Introduction

Some basic questions about graduates:

Select a set of graduates:

e.g. 1st-level-degree in Engineering field of study

- What is the average **evaluation mark**?
- What is the average **graduation mark**?
- How many students complete their studies **within prescribed times**?
- Which is the **average duration** of period of studies?



Introduction

Some less basic questions:

- Attending lessons:** how many students attended over 75 percent of classes prescribed by the degree course on a regular basis?
- Abroad studies:** how many students did study abroad periods with Socrates/Erasmus or other European Union programmes?
- Customer satisfaction:** how many students are definitely satisfied with their course of studies?
- Working condition during studies:** how many students worked during their studies and how the studies quality was affected?



Some less basic questions:

Advanced questions:

Working condition after studies:

- how many graduates find their job 12 months after graduation?
- After 3 years, after 5 years?

Degree effectiveness:

- was your degree useful or necessary to get your job?

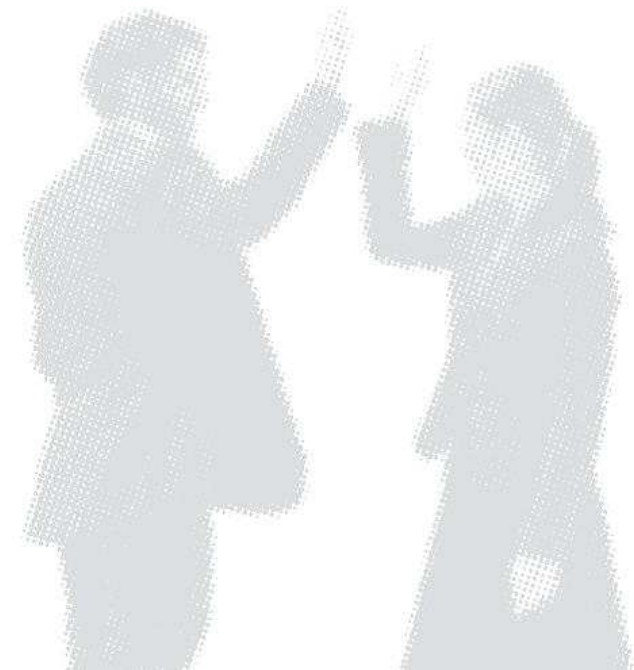


Demo



web1 web2

powerpoint



- ❑ Answers to this kind of questions cannot be found in administrative records usually collected by Universities
- ❑ We want to measure the internal and external effectiveness of the Universities:
 - Administrative data must be integrated by other information collected by surveys

Solution?



AlmaLaurea: system overview

graduates



questionnaire



administrative data (certified)

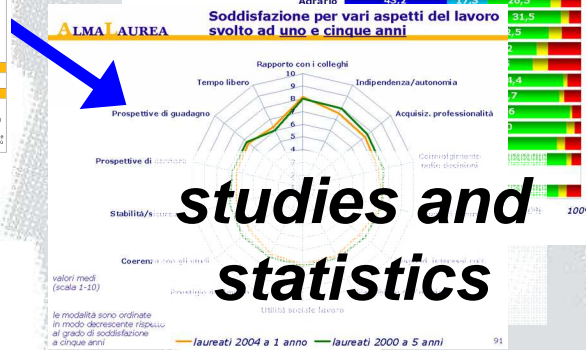
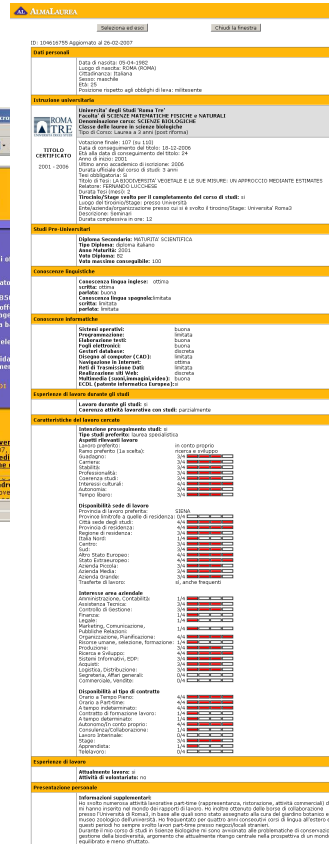


University

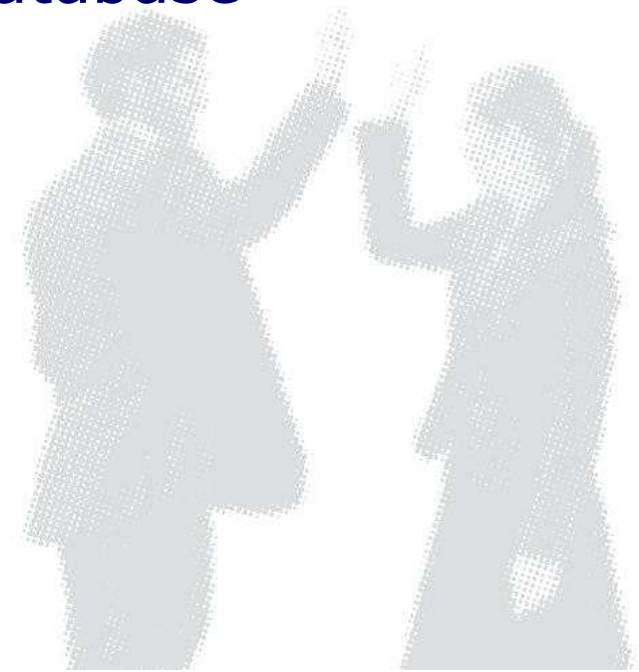
companies



curriculum vitae



- ❑ **quality:** relevant CV data are certified by university
- ❑ **completeness:** all the graduate records are transmitted to the AlmaLaurea database



The main process: data collection

- ❑ Questionnaire (online)
 - registration
 - CV info
 - valuation about university experience
 - future perspective
- ❑ Administrative data collection
 - periodical dump of graduates data
- ❑ Cleaning up and publication
 - check for data integrity and correctness

address, phone numbers and email are very important:

- graduates are contacted by companies for employment purposes
- graduates are contacted by AlmaLaurea for statistical analysis



Data collection

- ❑ Data are transmitted at specific dates
 - ❑ All the graduate records are transmitted
 - ❑ Data collection and cleaning is performed by a web application
1. University staff
 1. uploads graduate records
 2. Verify data quality at acceptance level
 3. Fix errors (domain errors, coherence errors, ...)
 4. Transmit data
 2. AlmaLaurea staff
 1. Merge administrative data with surveys
 2. Verify data quality at premium level
 3. Fix errors
 4. Publish data in the online CV database



Secondary processes

Post graduation surveys

- CATI and CAWI surveys on working condition (every year)
- CATI and CAWI surveys on more specific subjects (on demand)

CV update

- online update.
- certified data update. More complex process which involves University staff.

Recruitment related activities

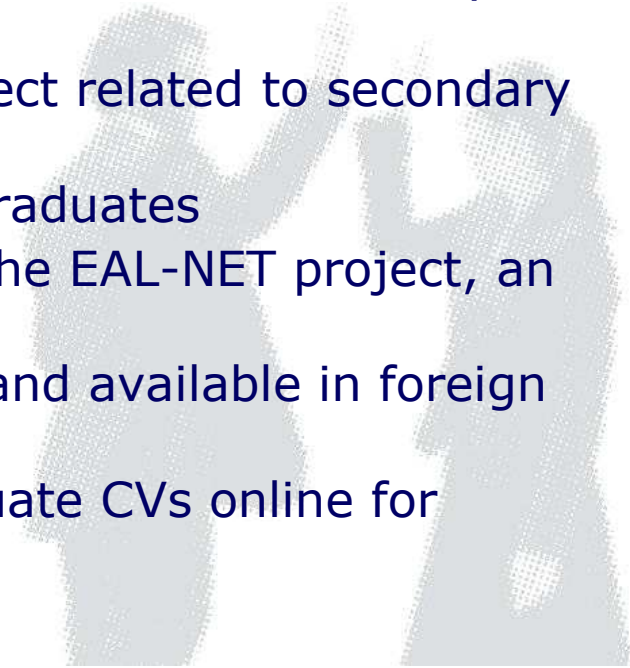
Other processes

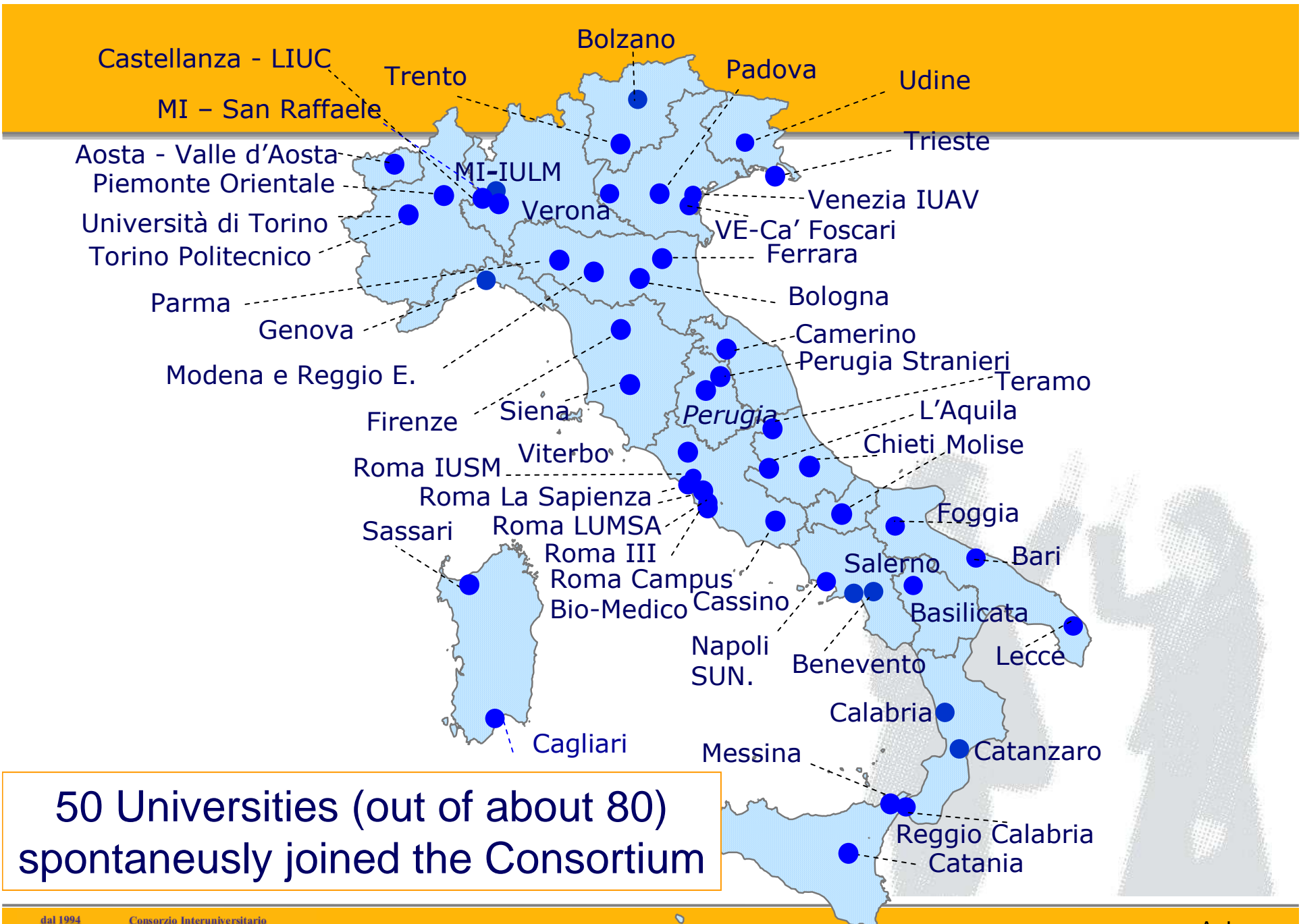
- technical assistance
- help desk for graduates, companies, universities



Milestones

- ❑ 1994. The Statistical Observatory of the Bologna University started the **AlmaLaurea project** in order to *create a meeting point for graduates, universities and companies*
- ❑ 1996. 5 Universities.
- ❑ 1997. The graduates CVs are available online
- ❑ 2000. 21 Universities.
 - AlmaLaurea becomes an Interuniversity Consortium funded by the Italian Ministry of University
 - AlmaLaurea founds the AlmaDiploma project related to secondary school education
- ❑ 2004. First results about “Bologna process” graduates
- ❑ 2005. 40 Universities. AlmaLaurea launches the EAL-NET project, an European Network of Universities
- ❑ 2006. AlmaLaurea CVs are made searchable and available in foreign languages
- ❑ 2007. 50 Universities. About 1,000,000 graduate CVs online for recruitment

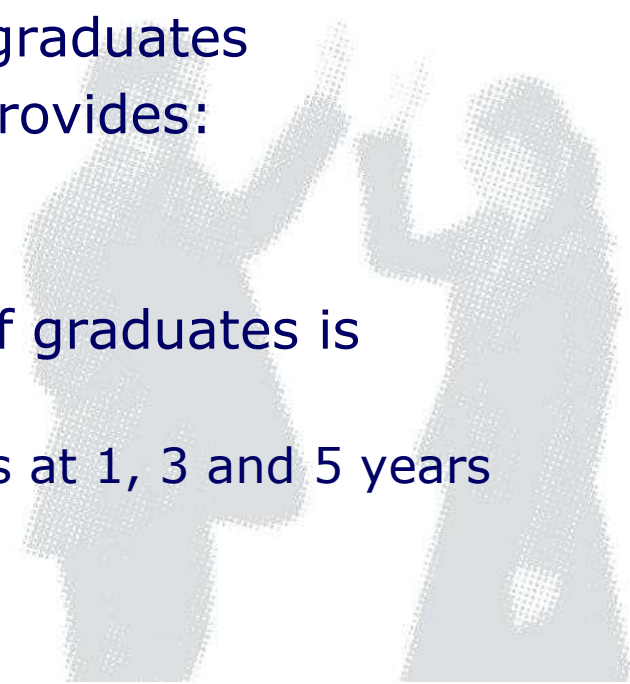




50 Universities (out of about 80) spontaneously joined the Consortium

AlmaLaurea: 2007

- ❑ at the end of October, 2007:
 - 950,000 CVs are available for placement
 - 1,070,000 records are available for statistical purposes
- ❑ every year about 180,000 Italian graduates enter the database: about 67% of all the Italian graduates
- ❑ every year the snapshot of graduates provides:
 - progress in Bologna process application
 - detailed statistics at course level
- ❑ every year the occupational condition of graduates is explored
 - the analysis is performed over graduates at 1, 3 and 5 years after graduation

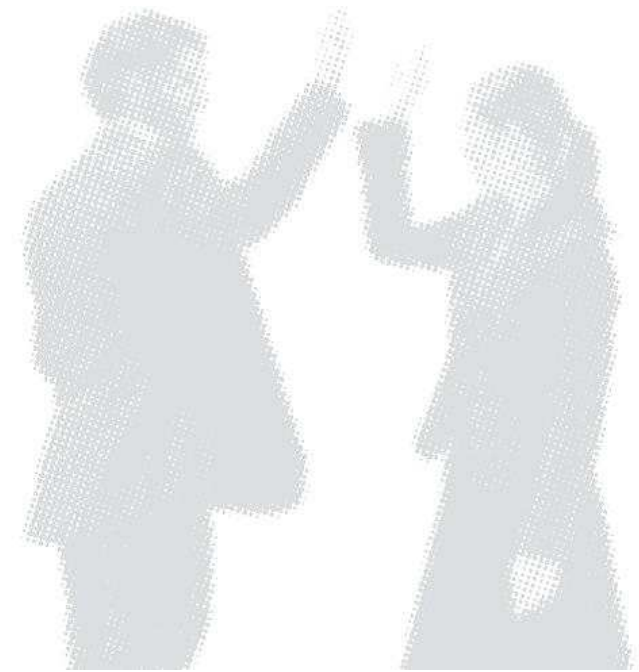


CV database

Field of study	CDL	LS	DU	L	Totale
Agricoltura	14.905	1.130	700	5.673	23.912
Architecture	29.137	1.608	597	10.195	42.717
Chemistry, Farmacy	23.498	1.027	460	4.084	32.831
Security	0	6	0	217	223
Economics, Statistics	93.708	5.588	4.903	40.992	145.390
Physical Education	2.759	555	1.741	3.673	8.728
Geology, Biology	24.479	2.808	106	12.222	39.615
Law	90.636	1.769	788	14.425	107.788
Engineering	63.992	7.061	6.405	34.823	112.393
Education	34.554	766	65	12.687	48.162
Humanities	59.427	2.857	787	23.660	86.850
Foreign languages	35.061	1.102	818	15.790	52.793
Medicine	21.756	1.643	9.968	30.207	72.950
Politics, Social science	58.246	5.324	1.840	47.575	113.584
Psychology	20.665	3.026	0	13.967	37.658
Mathematics, Physics, Natural Sciences	15.629	2.115	857	10.541	29.142
Total	588.452	38.385	30.035	280.731	954.736

Other services

- ❑ The AlmaLaurea database is not used only for statistical purposes.
- ❑ Several services, based on the CV database, are provided to
 - Students and graduates
 - Companies
 - Universities



Services for graduates

❑ CV available for placement

- certified by Universities
- updatable
- highly structured
- available in several languages
- automatic application to job offers

❑ Orientation purposes

- search your university course (undergraduate and graduate)
- statistics on graduates characteristics and occupational perspectives

❑ Feedback

- help to improve the system: the survey collects feedback about the university experience



Services for Companies

- ❑ Large database of graduate CVs:
 - search for young graduates
 - Search for experienced ones (up to 11-years experience)
- ❑ Job offer
 - publish job offers on the AlmaLaurea website
 - send email alert to selected sets of graduates
- ❑ Company profile
 - permanent display window for companies
- ❑ Career evaluation and comparison
 - compare graduate performances
- ❑ Pre-screening
 - select, collect, evaluate graduates for specific requested positions



Services for Universities and Institutions

- ❑ Evaluate the “internal” quality of education services
 - duration of studies, mark distribution, graduate satisfaction
 - abroad experiences
- ❑ Evaluate the “external” quality
 - occupational conditions of graduates
 - success in further studies
- ❑ Promote educational offers
- ❑ Improve the occupational conditions
 - recent results [Bagues-Sylos Labini 2005]

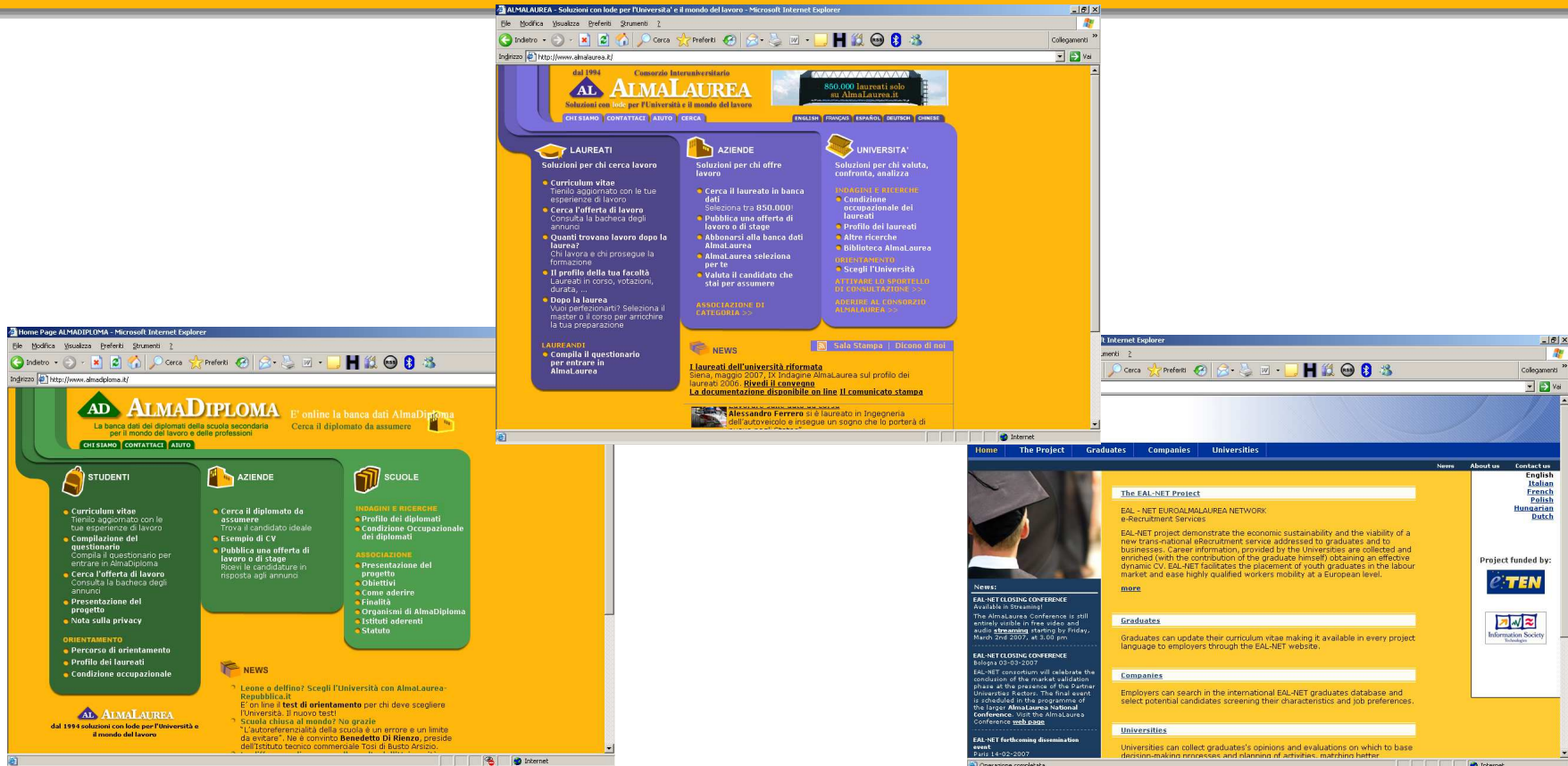


AlmaLaurea virtual loop

- ❑ Companies buy AlmaLaurea services
 - Improve labour market
 - Fund the organization
- ❑ Graduates are encouraged to update their CVs to have greater selection probability
 - Improve service for company: updated and fresh CVs
 - Improve statistical analyses
- ❑ AlmaLaurea provides periodical and detailed statistical documentation
 - Improve the University system
 - Fund the organization



AlmaLaurea extensions

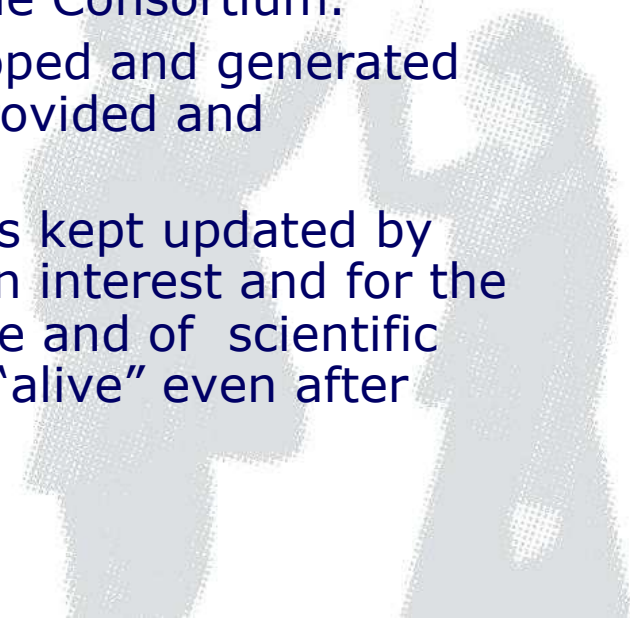


AlmaDiploma

EAL-NET

Conclusions

- ❑ **Completeness.** ALMALAUREA collects **all** the administrative data of the graduates from the universities which are members of the Consortium. The surveys have very high response rates.
- ❑ **Timeliness.** The results of the surveys are published by March (Report on the Occupational Condition) and June (Graduate Profile Report) of the year following data collection.
- ❑ **Reliability.** The collected data are analyzed and, if necessary, corrected in close and continuous cooperation with the persons in charge for the universities which belong to the Consortium.
- ❑ **Continuity.** The services and surveys developed and generated from 1994 to-date are part of the services provided and guaranteed over time.
- ❑ **Updateability.** The ALMALAUREA database is kept updated by the graduates who edit their CV's in their own interest and for the benefit of companies who look for staff to hire and of scientific research which can rely on information kept "alive" even after many years from graduation.



Any more information?

Any question?

- Ask me now
- Visit our websites:
 - <http://www.almalaurea.it>
 - <http://www.eal-net.org>
 - <http://www.almadiploma.it>
- Contact me:
 - alberto.leone@almalaurea.it

