



Tunisia's S&E Human Resources: a Catch-Up Competitive Advantage Ready to be Deployed

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...established wisdom!

Human capital plays a decisive role, and the capacity to learn matters more than the level of knowledge. While **secondary** school certificates were the trump cards of **industrialization**, **higher degrees** are those of the **knowledge economy**. **Lifelong** training is essential.

Lundvalle, 1998

Knowledge Economies in MENA, WBI, 2003

“Over the next ten years, 26 of the top 30 fastest growing jobs require some post-secondary education or training ... The **demand** for skilled workers is **outpacing supply**, resulting in attractive, high-paying jobs going **unfilled**.”

Assistant Secretary of Labor for Employment and Training

Innovate America, Dec. 2004

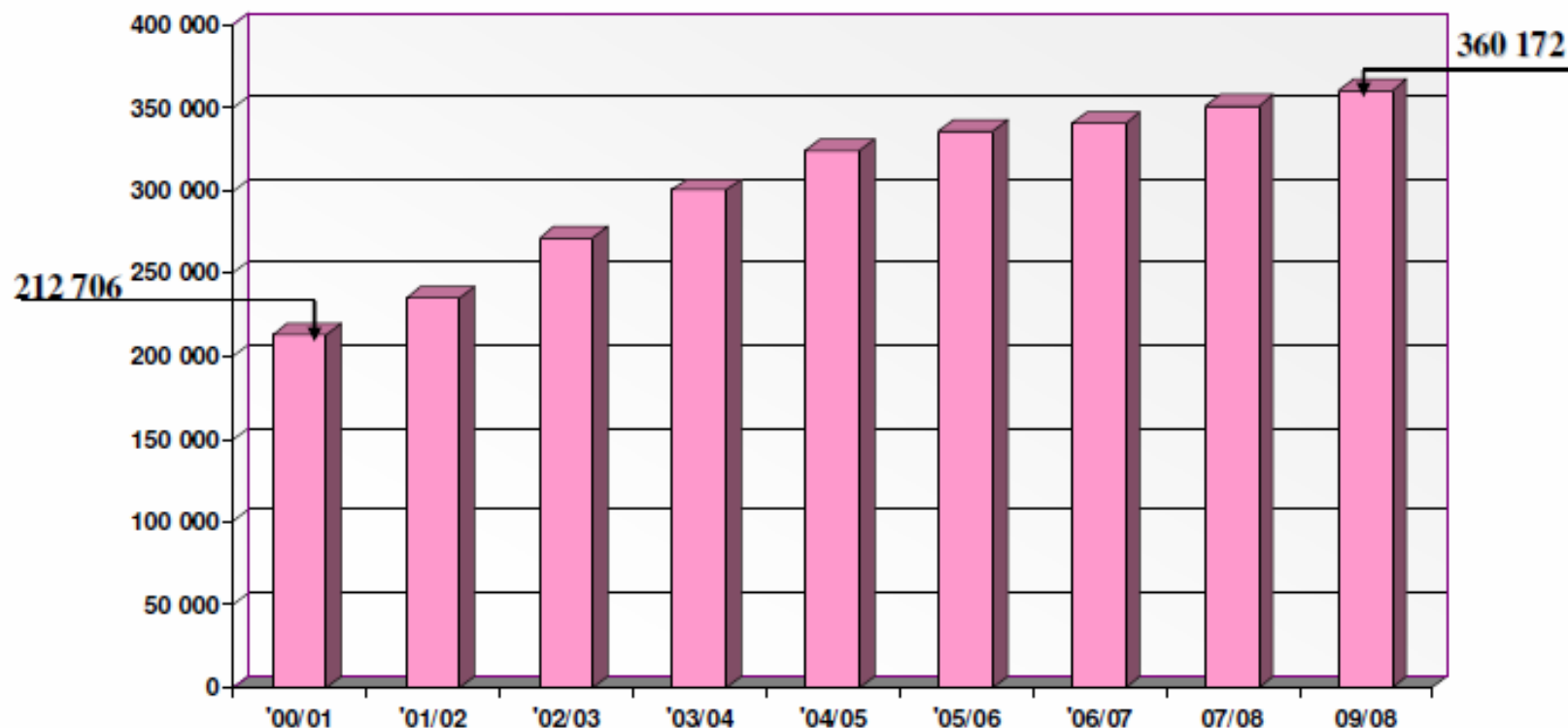




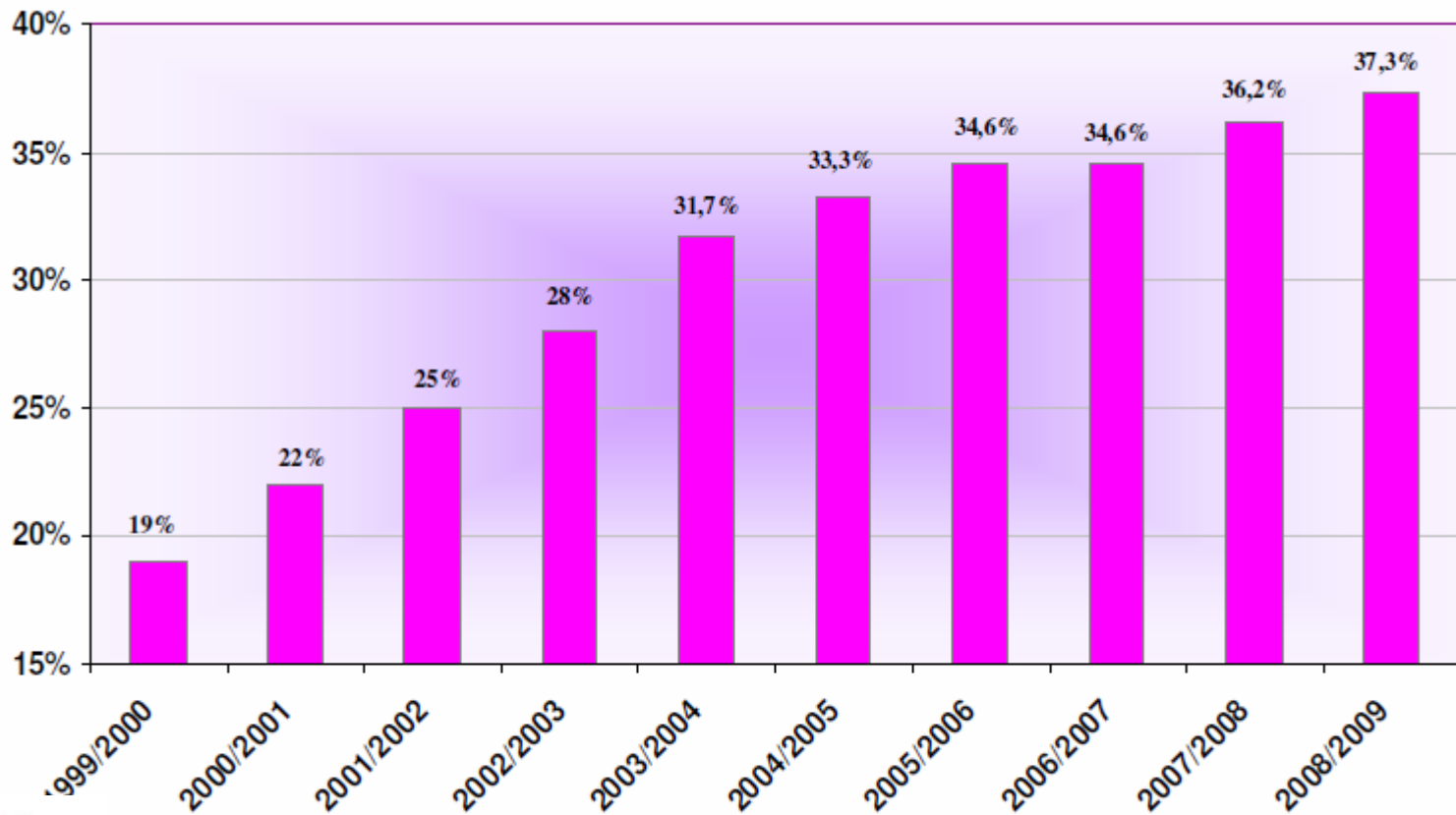
2008 1958

معرفة متألعة
وطموح منبسط

Major Trends: University Enrolment Evolution



Major Trends: University Enrolment Rate for 19-24 Age Group

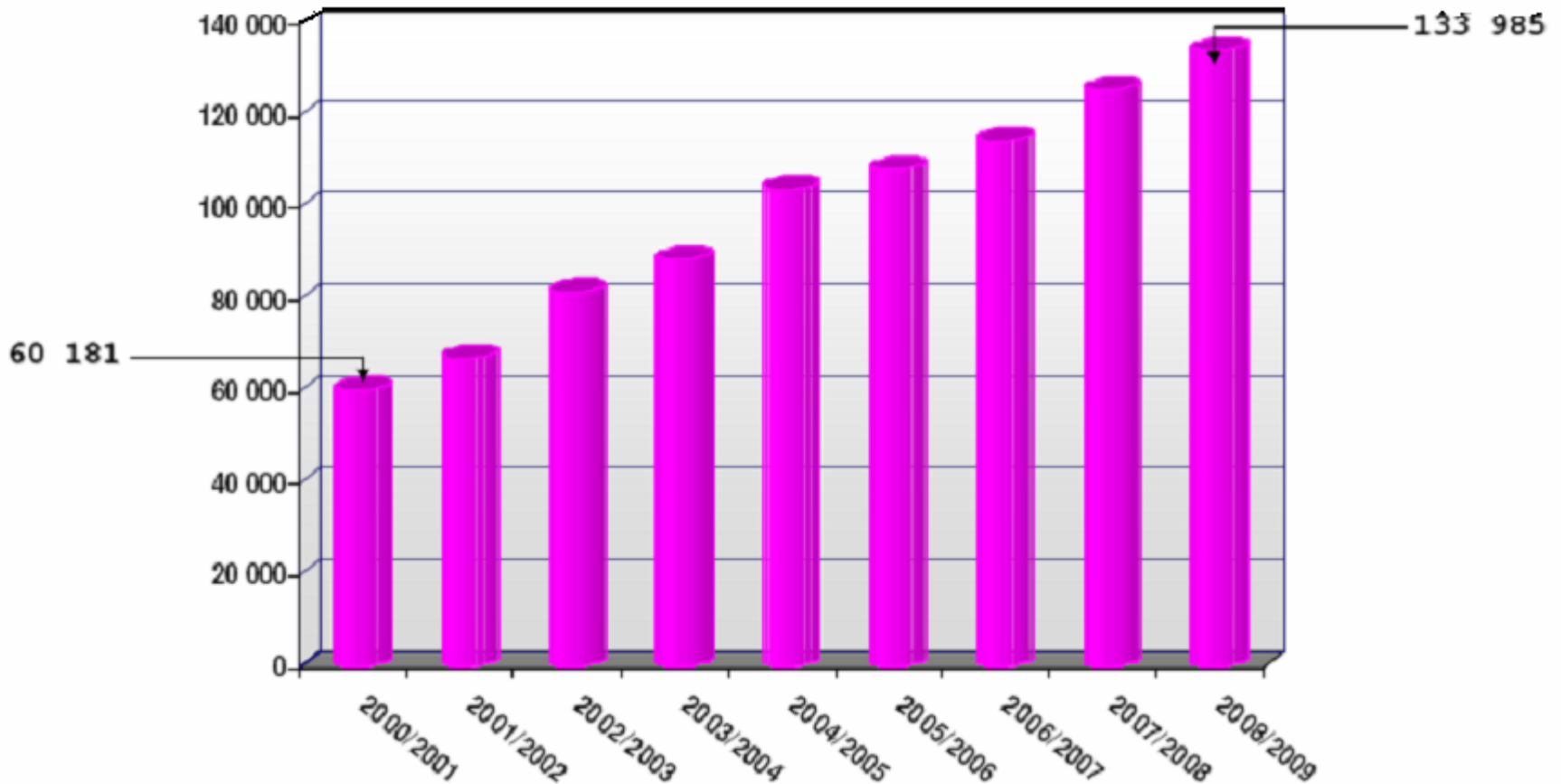


2008 1958

معرفة متبادلة
وطموح متجدد

CarthageForum, 2010

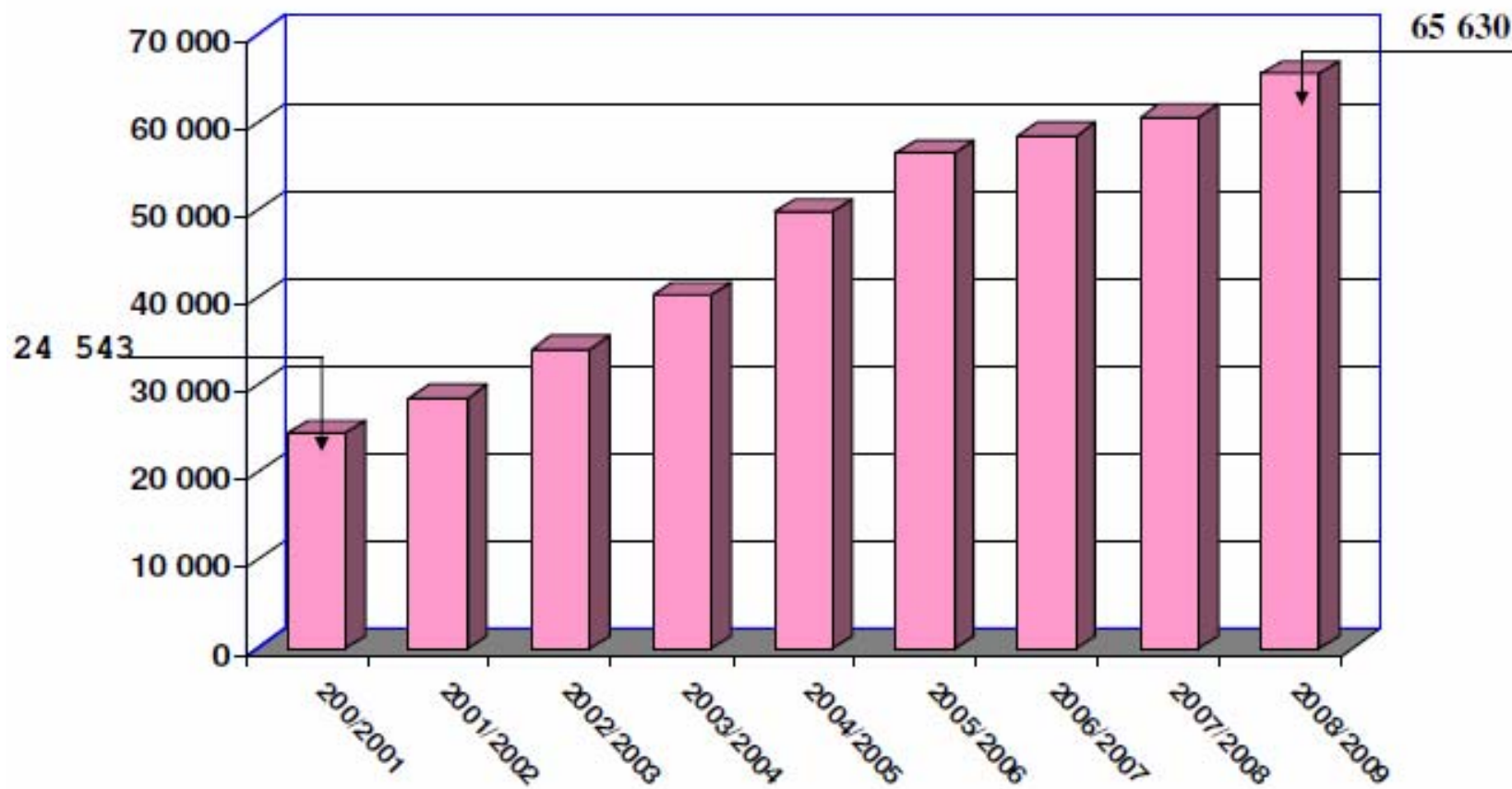
Major Trends: S&E Enrolment Evolution



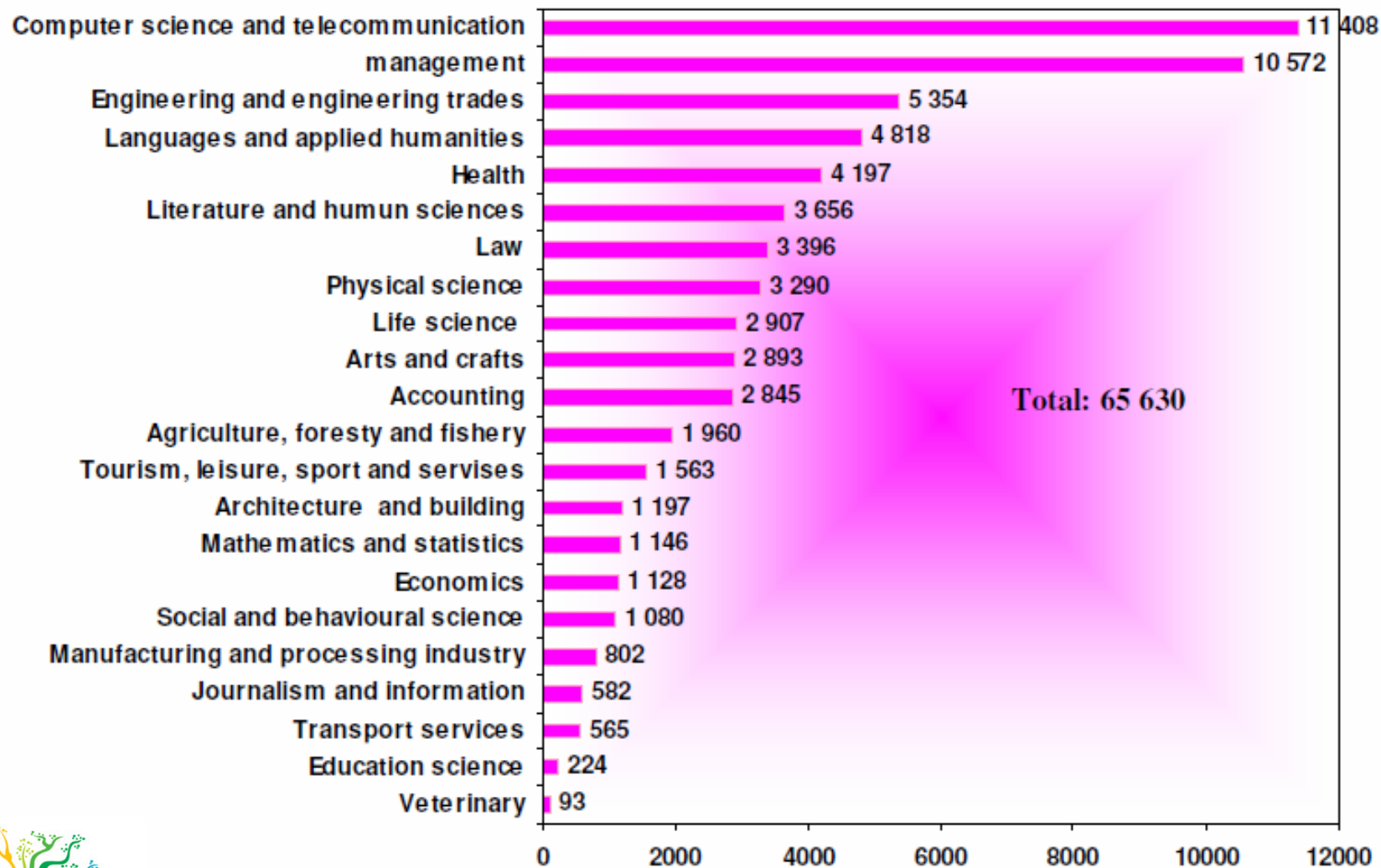


2008 1958
معرفة متألعة
وطموح منجد

Major Trends: University Graduates Evolution



Grads by Field of Study (2009)



Distribution of graduates by field of study (2009)

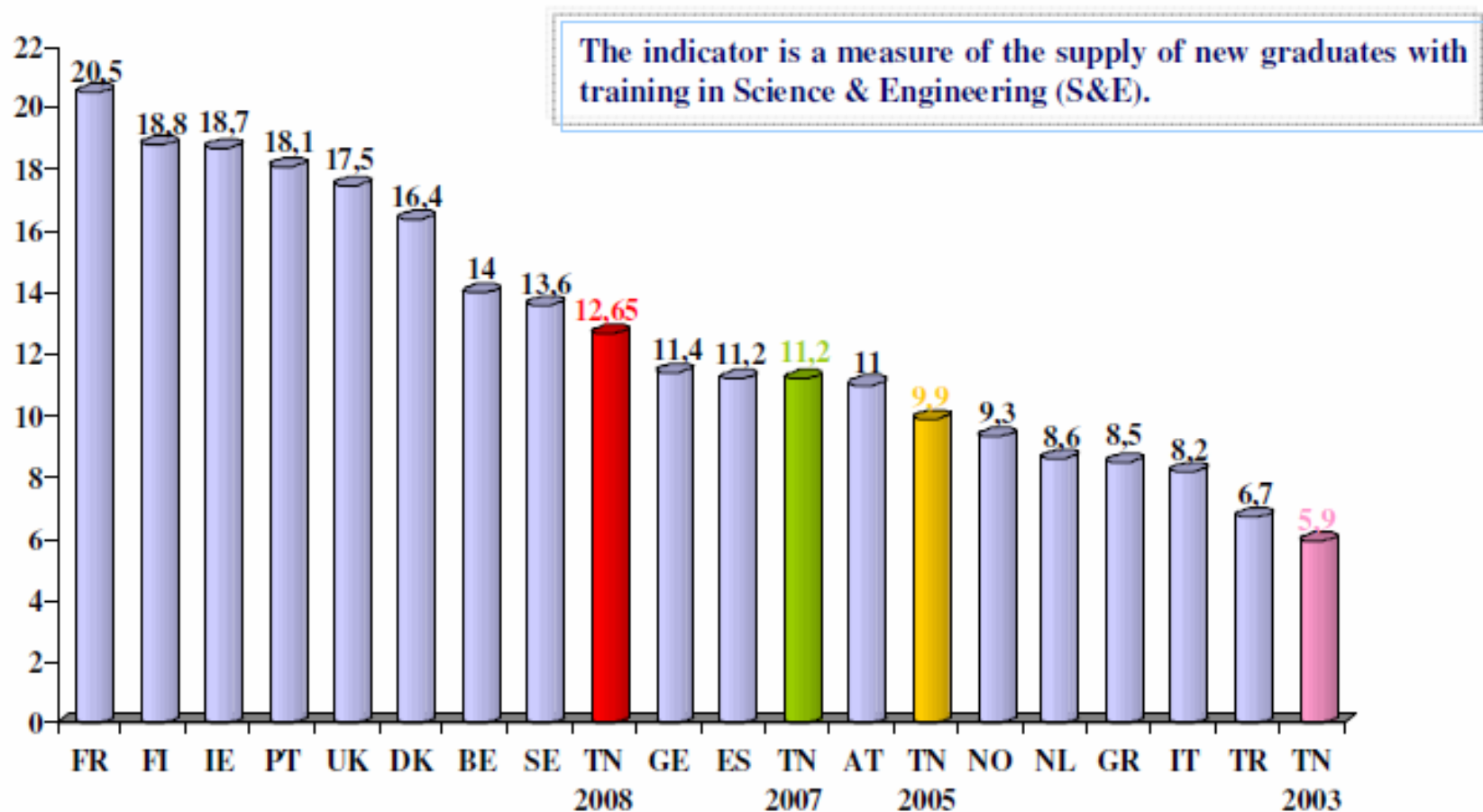
CarthageForum, 2010



2008 1958

معرفة من أجل
وطن متجدد

New S&E Grads (2007)



New science and engineering graduates (% of 20-29 years age class), 2007



The Coming 5 years: Enhancing Relevance and Quality

- Bring HE's quality up to international standards by creating the National Instance of Evaluation, Quality and Accreditation (2011),
- Finalize the adoption of a National Qualification Framework (most advanced Southern Mediterranean country, Tempus Report 2010),
- Increase the time allocated to IT, Entrepreneurship & English,
- Finalize the Bologna Process (LMD) by 2011,
- Promote the system of certification,
- Increase the number of joint-degrees with renowned international institutions,
- Etc.

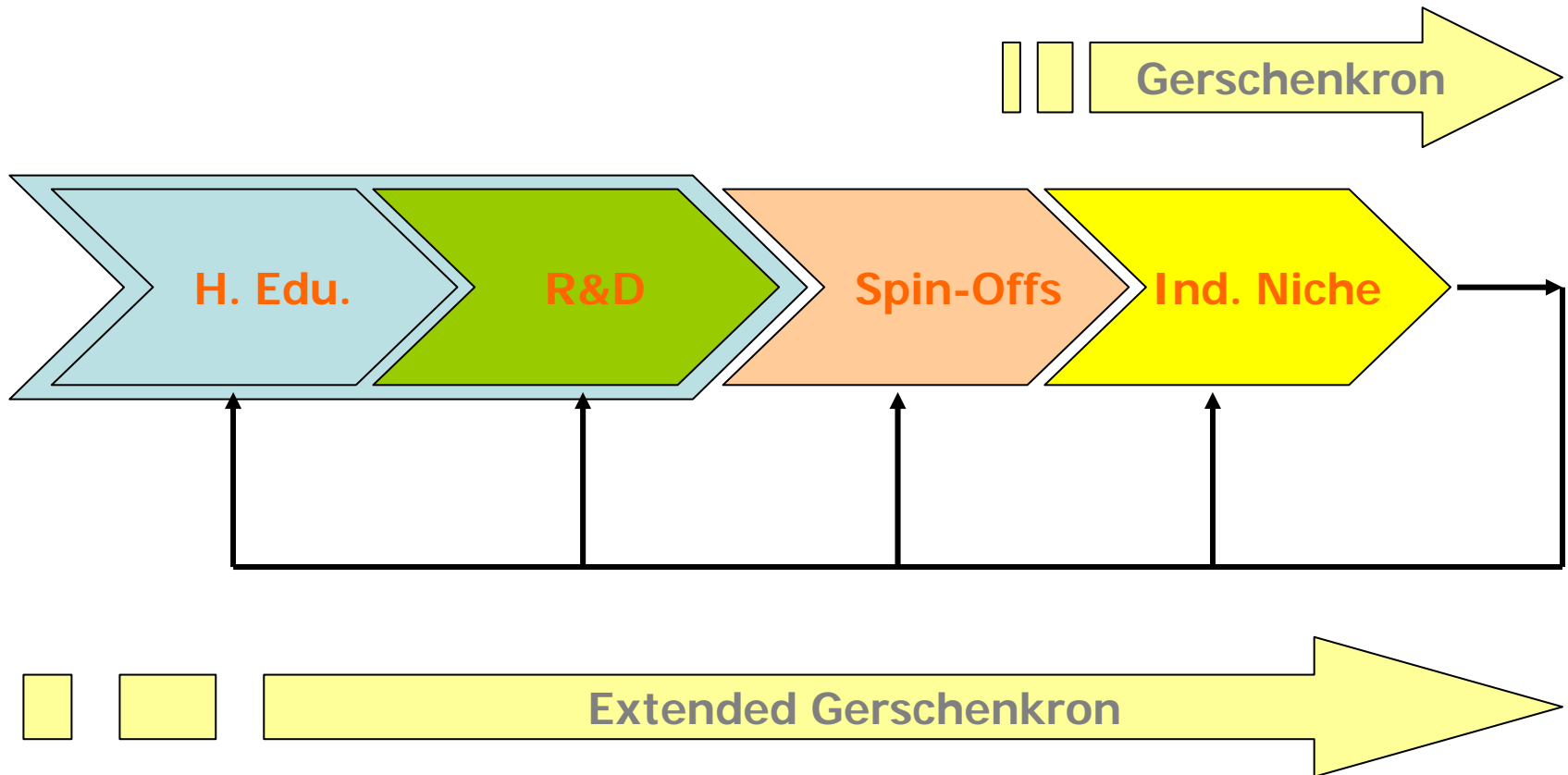
The Coming 5 years: Accelerate S&E throughput



- Achieve 18 (per 1000 population aged 20-29) S&E Grads (2014),
- Increase the number of Engineering grads to 9000 by 2014, while keeping/enhancing the students to faculty ratio,
- Encourage the adoption of English as a teaching/learning means,
- Boost the certification of Eng. Grads to 50% by 2014,
- Create four new Engineering schools by 2014,
- Reduce skills mismatch, while conferring the required flexibility to swiftly respond to new needs ...

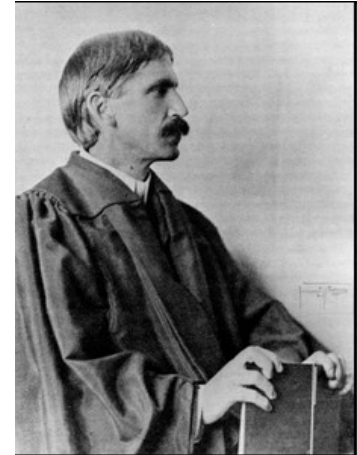
Out-of-the-Box Thinking :

Gerschenkron like catch up



...back to modern wisdom!

Education is a social process;
education is growth; education
is not a preparation for life
but **is life itself**. John Dewey



The **skill** a **student** acquires in a
craft, and the habit he attains,
correspond to the **quality** of
instruction and the habit of the
teacher. A. Ibnou Khaldoun

