

55th EOQ Congress
World Quality Congress
Budapest, Hungary - June 20-23, 2011

"Navigating Global Quality in a New Era"



June 22, 2011 (Wednesday) 55th EOQ Congress

CONCURRENT SESSIONS
KEMPINSKI HOTEL CORVINUS

Wednesday 8:30 – 10:30
Erzsébet tér 7-8, Budapest V.

SALON BANDINI/MARZINO

9.3. EDUCATION OF QUALITY – QUALITY OF EDUCATION III. 8:30 – 10:30

Co-Organizer: Óbuda University

Session Chair: Gábor Veress, University of Pannonia, Hungary

8.30 Quality Culture in Institutes of Higher Education
Avner Halevy and Michal Daloya, University of Haifa, Israel

Halevy, Avner (Israel)

PhD, 1977, the University of Sheffield, England. In the 1970s he held various positions in Quality Management in the industry. In the 1990s he worked at the Statistics Consulting Unit, University of Haifa (as Head, 1994-1997) and he was member of staff, Department of Statistics, University of Haifa. Beginning from 2004 he is Head of the Department of Statistics and Head of the Postgraduate Program in Quality at the University.

A photograph of a tall, modern building with a glass facade, situated on a hillside. The building is surrounded by greenery and other smaller buildings in the background. The sky is clear and blue.

Quality Culture in Institutes of Higher Education

Avner Halevy & Michal Daloya, University of Haifa

The 55th EOQ Congress, Budapest, June 2011

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Quality Culture in Institutes of Higher Education

**A transaction is generally an agreed
act between the involved parties.**

**Each of these parties is interested in
drawing maximum benefit from the
said transaction.**

2



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This is a classic win-win game in which we may expect to observe elements of bargaining, rationality, a certain degree of cooperation and the possible transfer of assets from one party to another.

3

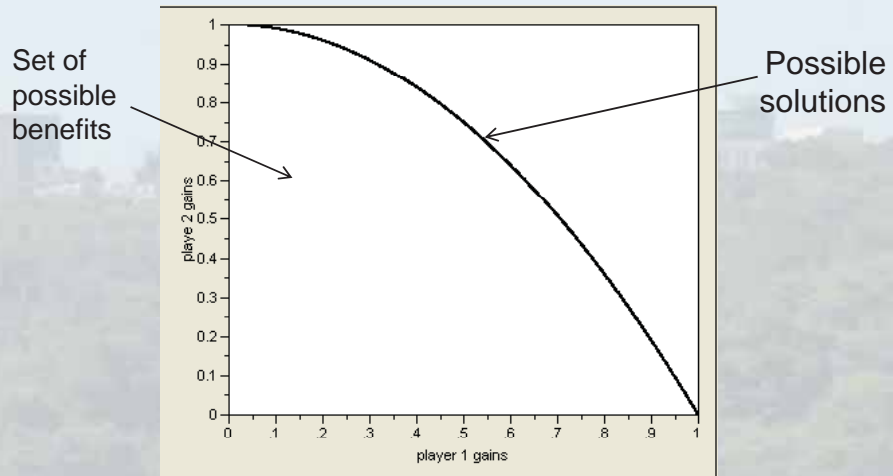


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In a rational bargaining game between two players [Nash, 1950], there are many solutions but just one optimal solution, maximizing the product of both parties' gains.

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Observing a national economy, it would seem to be a big waste of resources and effort if each customer needed to establish and maintain the means, the abilities and the infrastructure...

6



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**...for controlling and assuring the quality
of incoming items from each and every
one of its suppliers.**

**In fact, this is not just impractical, but
outright impossible.**

7



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**A common practice in the
economy is to perform a certain
level of incoming quality control.**

8



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**Why don't organizations employ
the most effective tool for
controlling incoming quality –
trust?**

9



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**Because, in the real world, some
suppliers send off faulty products
and services, inflicting damages
on their customers.**

10



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If we borrow a model developed for the animal kingdom [Maynard Smith, 1974], as long as the proportion of dishonest suppliers is small enough, the rest of the population will tolerate them but might employ some defensive precautions.

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[Maynard Smith & Price, 1973] showed that a relatively docile strategy can be evolutionarily stable if most parties employ it. Then, total benefit to all is maximized. In such a state, a small proportion of violators is tolerated.

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In the industrial market, we may describe supply chains as a series of bargaining games.

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In a simple 2-player game, Player A, the supplier, and Player B, the customer, wish to maximize their respective benefits.

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As long as both players are rational, they do not wish to risk their reputations by openly deceiving their opponents. But a certain proportion of A players is deceitful, trying to raise gains by reducing quality and contents of the supplies.

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Which is why a state of equilibrium in the economy maintains a certain level of incoming quality control abilities, such as incoming inspection, suppliers' ratings and contractual optional sanctions taken against exposed deceitful suppliers.

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In Quasi Markets, customers lack the ability to judge the quality of products or services rendered. One such quasi market is the educational services system - elementary, high and higher.

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Customers (students, parents, future employers, the economy – present and future, society – present and future) must trust academe with creating suitable and compatible educational programs, syllabi and teaching methods.

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In industries where foul play by suppliers might cause health or safety risks to customers, governments take upon themselves to gallantly protect and defend their citizens and voters.

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They do it by regulating the suppliers and imposing strict control over their conduct. In higher education institutes (HEIs), measures may be strict formal requirements, close supervision,

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**accreditation systems, audits,
control over syllabi and
examinations, re-accreditation
programs, periodical assessment
and evaluation programs.**

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**However, regulating bodies lack
the means and ability to fully
control their allotted public
service suppliers.**

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**They therefore have to rely on
activities performed by the
regulated bodies themselves**

23



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**The regulator presents managerial,
operational and professional
requirements to the controlled body
and periodically assesses adherence
to these requirements.**

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Quality is a measure applying to a transaction. The quality of a transaction is high if all parties have fulfilled their needs.

25



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Self evaluation of quality in an organization is analogous to a person's self-search,

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in which he looks for existential purposes, for challenges, goals and achievements, seeking continual improvement.

27



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Self evaluation of quality empowers the organization with taking full responsibility for the quality of its services or products and the quality of its work processes.

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The background of the slide shows a tall, modern university building with a glass facade, situated on a hillside. The building is partially obscured by a semi-transparent white box containing text. The sky is clear and blue.

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Some US universities and schools voluntarily undergo self evaluation of quality as one of the requirements for mutual recognition and accreditation agreements.

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In Europe, internal evaluation of quality, followed by an external examination, is one activity outlined by the Bologna accord.

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**The performance of self
evaluation of quality by HEIs has
become the major activity
required by regulating bodies.**



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**University departments find great
benefit in properly conducted
evaluation processes.**

However...



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**These positive processes are
associated with an external
demand by an accrediting,
regulating authority**

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**...and as such are considered by
the HEI's as a potential hazard to
their normative conduct.**

34



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**Hazards are normally confronted
with evasive or defensive
measures.**

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**There are several possible
scenarios to this game between
the HEI and the regulatory body,
three of which are:**

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**a. Having undergone a deep,
open, honest and exposed
evaluation process, the external
committee ignores its findings**

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**... and concentrates its efforts on
a petty search for irregularities,
nonconformities and other forms
of incompetence.**

38



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b. The external committee provides a helpful external angle to the self evaluation process and complements the internal process with some creative and useful advice.

39



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c. The HEI unit “stages a show” for the external committee, preparing itself for a “cops & robber” attitude and successfully passing this test.

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Scenario a is, unfortunately, the most common [Harvey, 2005; Halevy & Daloya, 2008].

Scenario c is known to exist and usually succeeds in fulfilling its intent.

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Scenario b is most desirable and provides a good combination of self improvement activity with external perspective and insight.

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In fact, scenario b, having been executed by two rational parties, leads to the desired outcome of a Nash [1950] bargaining game.

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The set of benefits comprises the possible levels of effectiveness and efficiency with which HEI's provide education to society.

44



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**In order for the game to end with
the optimal solution, granting
maximum (product of) benefits to
both players,**

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**Both players must be rational
and remember their missions:**

46



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**The HEI's aim must be focused
and set upon providing a high
level of high education to society
(research and teaching)**

47



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**The regulatory body must abandon its
feeling of power (encouraged by its
role as a regulator) and seek to
provide the best attainable service to
society, that is -**

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**Quality Culture
in Institutes of Higher Education**

**Ensure that the HEIs are
indeed dedicating
themselves to fulfilling
society's needs...**

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**Quality Culture
in Institutes of Higher Education**

**...and to improving society's
future well-being.**

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