Why managers should not replace Socrates in the boardroom

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What I will present

- 1. Summary of my leadership research
- 2. Why we need experts as leaders

My central argument is

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If expert knowledge is the key factor that characterizes an organization, it is expert knowledge that should be key in the selection of its leader

The empirical setting

Universities

Following the last RAE

Queen Mary, University of London, went from 48th in 2001 Times Higher Education RAE ranking to 13th in 2008, up 35 places

Who led QM?



Who led QM?

Adrian Smith, one of the most distinguished academic-

leaders in post at that time



Is this a coincidence?

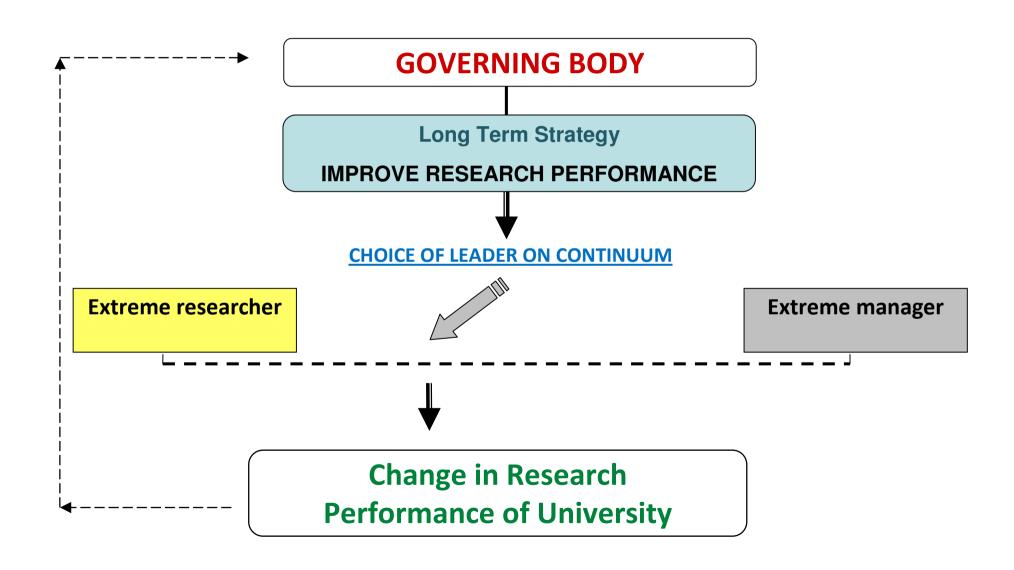
My research question

Who should lead universities?

Good managers?

Good academics?

Appointment of a scholar on a Continuum between Extreme Researcher and Extreme Manager



Scholarship is not a proxy

 For management experience or leadership skills

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Scholarship is not a proxy

- For management experience or leadership skills
- Most academic administrators in senior leadership positions are tenured professors – have led departments, run research centres and laboratories, acted as deans or provosts

Key Findings

1. The best universities are led by top academics

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1. The best universities are led by top academics

2. Top academics seem to improve the <u>later</u> performance of their university

Background to the study

Personal perspective

Background to the study

Personal perspective

Methodological approach

The challenges of studying leaders

The challenges of studying leaders

Unlike in scientific experiments we cannot randomly assign a leader to an organization







Iceland



MIT President Susan Hockfield



Afghanistan



Silvio Berlusconi





Tony Blair



Tony Hayward

Creationist **Communit** College

The challenges

In much leadership work there is too much emphasis on anecdotal evidence

Researchers often get too close to their subjects

The Research

Two cross-sectional studies

100 top universities and 100 business schools

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Longitudinal study

Performance of 55 universities in the RAE 1992, 1996 and 2001

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Longitudinal study

Performance of 55 universities in the RAE 1992, 1996 and 2001

Qualitative data

26 interviews with university leaders in the US and UK

Stage 1 of research

Who are top universities currently appointing as their leaders?

How do we measure a top academic?

By hand-counting and normalizing lifetime citations into a <u>P-Score</u>

P-Score = President's lifetime citations normalised for discipline

How do we identify a top university?

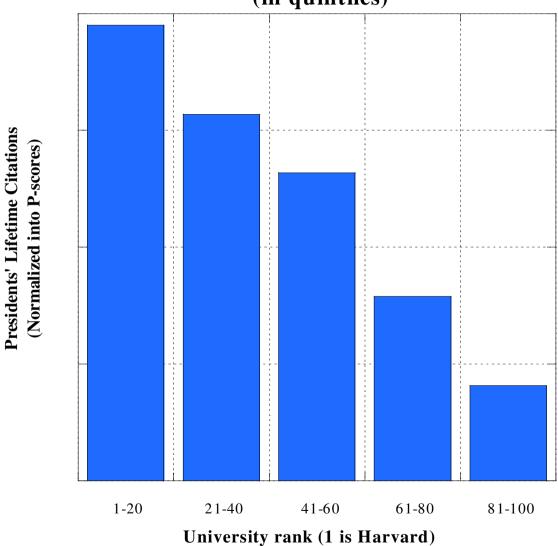
Academic Ranking of World Universities (2004), Institute of Higher Education, Shanghai Jiao Tong University

Here I examine the relationship between the position of a university in a global ranking and the lifetime citations of its leader

Conclusion 1

The best universities are led by the most-cited researchers

A Cross-Tabulation of Presidents' Lifetime Citation P-scores by World University Rank (in quintiles)



Is the finding statistically significant?

Results of Cross-Sectional Correlations of Presidents' Lifetime Research Citations by University Rank from Four Different Sub-Samples

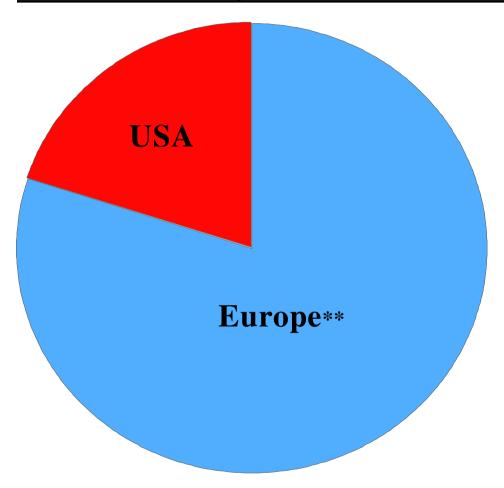
Pearson's Correlation Coefficient between Lifetime Citations and Rank	(1) Presidents of top 100 universities (n=100)	(2) Female presidents (n=15)	(3) US presidents (n=51)	(4)Presidents from the rest of the world (n=49)
	0.344***	0.690**	0.375**	0.140

^{***}p < 0.001 **p < 0.01

How do US universities compare with those in Europe?

Share of Nobel Prizes Awarded to Individuals in Institutions in Europe and the USA 1900-1950

Share of Nobel Prizes awarded to individuals in institutions in Europe and the USA 1900-1950*



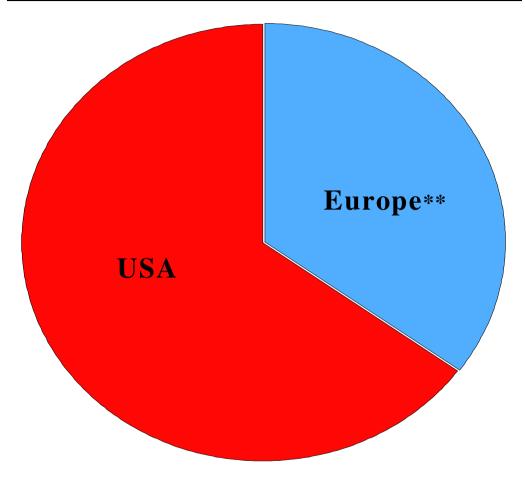
^{*} Nobel Prizes awarded in chemistry, medicine and physics.

^{**} European Countries are: Austria, France, Germany, Italy, Netherlands, Sweden, Switzerland and UK. Data from www.nobelprize.org.

As compared with:

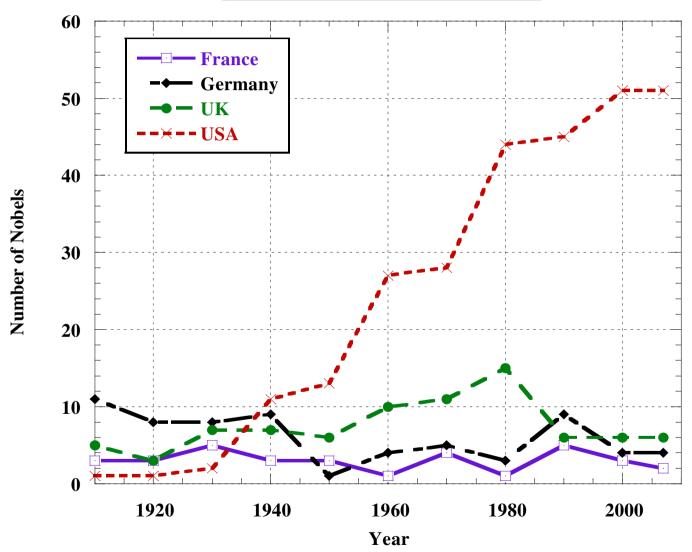
Share of Nobel Prizes Awarded to Individuals in Institutions in Europe and the USA 1951- 2007

Share of Nobel Prizes awarded to individuals in institutions in Europe and the USA 1951- 2007*



- * Nobel Prizes awarded in chemistry, medicine, physics and economics (added 1969).
- ** European Countries are: Austria, France, Germany, Italy, Netherlands, Sweden, Switzerland and UK. Data from www.nobelprize.org.

Number of Nobel Prizes awarded to individuals in institutions in France, Germany, UK and USA per decade between 1900 - 2007*



^{*} Nobel Prizes awarded in chemistry, medicine, physics and economics.









What about business schools?





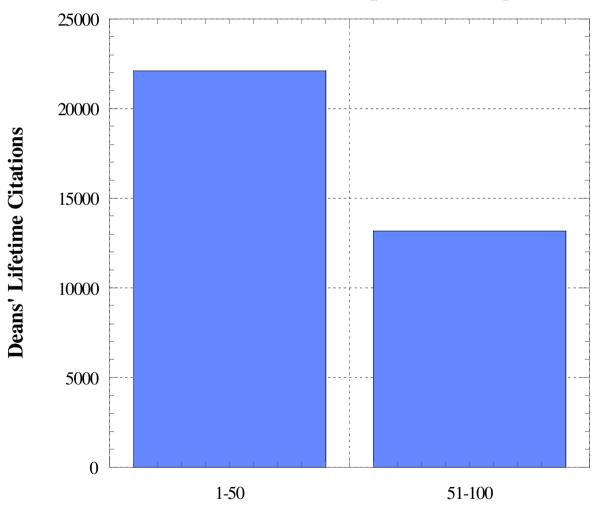




Deans of Business Schools

Deans in Financial Times Global MBA ranking 2005 of top 100 business schools

Business School Deans' Life-time Citations in FT Top 100 ranking



Buinsess School Position in FT Top 100

Is the finding for deans statistically significant?

Results of Cross-Sectional Correlations of Deans' Lifetime Citations by Business School Rank from Four Different Sub-Samples

Pearson's Correlation Coefficient between Lifetime Citations and Rank	(1) Deans of top 100 B-schools (n=100)	(2) US B-school deans (n=58)	(3) Deans from the rest of the world (n=42)	(4) UK Deans and RAE rating (n=38)
	0.288**	0.419***	0.000	0.452**

^{***}p < 0.001 **p < 0.01

Results

- The higher up the university is in the global ranking, the more likely it is that the citations of its president will also be high.
- In other words, better universities appoint better researchers to lead them.

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- The higher up the university is in the global ranking, the more likely it is that the citations of its president will also be high.
- In other words, better universities appoint better researchers to lead them.
- US universities select more distinguished academics as leaders compared with universities in Europe and the rest of the world.

What the correlations tell us and what they don't

➤ Media-generated league tables are not a dependable measure of quality

What the correlations tell us and what they don't

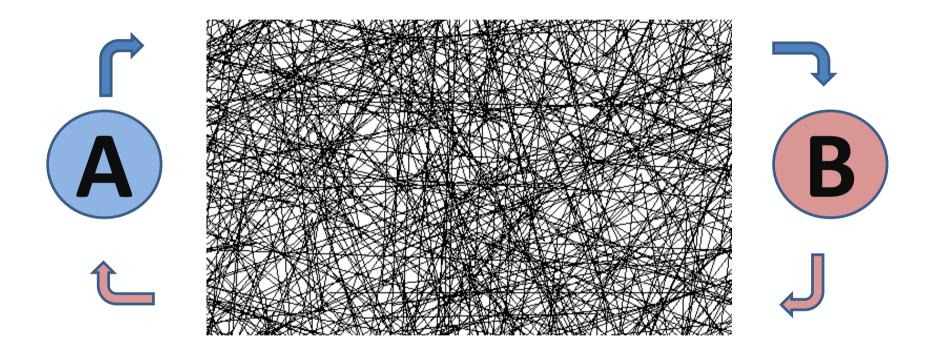
- ➤ Media-generated league tables are not a dependable measure of quality
- The findings do not prove that top academics actually make effective leaders

- Top universities and business schools may be more likely to seek out top academics as leaders, and these institutions may seem more attractive. Rational assortative matching
- The correlations may be explained through unobservable heterogeneity

So what evidence is there that academic leaders improve performance?

This gets to the question of causality

Causality in the social sciences



In part 2 of my study

I have tried to stand back to observe patterns that might be generalizable

In part 2 of my study

To do this time lags have been incorporated

Longitudinal Study

Panel of 55 UK research universities

Longitudinal Study

- Panel of 55 UK research universities
- 147 university leaders

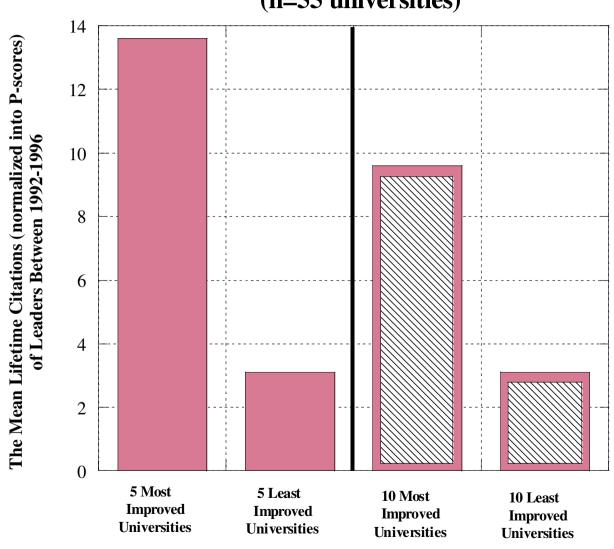
Longitudinal Study

- Panel of 55 UK research universities
- 147 university leaders
- Improvement over time in Research Assessment Exercise (RAE)

Results

The correlation exists in raw longitudinal data

Universities that Improved the Most in the RAE Between 1992-2001 Were Led by Vice Chancellors With Higher Lifetime Citations (n=55 universities)



Mainly I used multiple regression equations - with
control variables and
robustness checks — to try to
identify a causal association

What is the size of the effect of vice chancellors' research score on the future performance of their university's RAE?

- ➤ A hypothetical 1 point move up in a VC's P-score is estimated to be associated with 0.4 extra top departments in 2001
- > 0.3 extra departments when other variables are included

NB: Mean P-Score = 5

Mean University Performance = 7

Conclusion

The higher a president's lifetime citations, the more likely it is that their university will improve its performance in *future* Research Assessment Exercises

This finding has been replicated in other settings, for example:

Empirical study of clinician-leaders and hospital performance in the US

 Hospital CEOs – clinicians or non-MD managers?

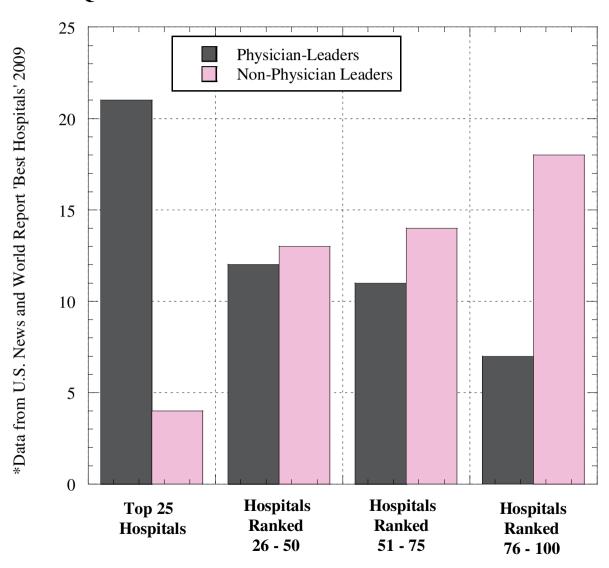
Empirical study of clinician-leaders and hospital performance in the US

- Hospital CEOs clinicians or non-MD managers?
- CEOs in the top-100 hospitals in Cancer, Digestive Disorders, and Heart & Heart Surgery. ('America's Best Hospitals' 2009 U.S. News and World Report)

Empirical study of clinician-leaders and hospital performance in the US

The higher a hospital's performance score, the more likely it is that its CEO is a clinician and not a manager

Proportion of Physician Leaders and Non-Physician Leaders across the Top 100 U.S. Hospitals in the Field of <u>Cancer</u>: By Quartiles*



Professional basketball

- Star basketball players make better basketball coaches (Goodall, Kahn & Oswald, July 2008)
- Using data from 15,000 basketball games we found that basketball teams in the NBA won more games if led by coaches who were star players or had long playing careers
- Controlling for other factors that affect team performance

Part 3 of my study asks:

Why might it matter if a leader is an expert?

Why might it matter if a leader is a top scholar?

Four possible explanations arose from interviews with 26 heads in UK and US universities

Explanation 1

A leader must be credible to followers. An accomplished scholar appears more credible, which enhances a leader's influence

"The rationale for ranking academic excellence very highly is the enormous importance we place on the president having the respect of the faculty. Without that, it is very difficult to lead a research university." Shirley Tilghman, President Princeton

Explanation 2

Leaders with high technical ability have developed expert knowledge about the organization's core business -- research and teaching

"A leader who is an academic helps to mobilize people. People are much more important in academic institutions than conditions. Everything in a university flows from the academic value of faculty." Anthony Giddens, former Director LSE

Explanation 3

It is the responsibility of leaders to set the academic standards

"Leaders are the final arbiters of quality. Therefore it is right to expect the standard bearer to first bear the standard." Patrick Harker, former Dean Wharton School

Explanation 4

Selecting a top academic to lead a research university sends out a signal about priorities

"Being a researcher sends a signal to the faculty that you, the president, share their scholarly values and general understanding. It also sends an internal signal to colleagues that research success in the institution is important." Amy Gutmann, President **University of Pennsylvania**

The message from this research about leadership

In organizations where the core business is knowledge-focussed such as universities, R&D units, banks, and professional service firms, we should look to hire leaders who are experts not just managers

One important consideration

There must be a fit between the leader and the organization's strategy and key workers

George Bain, former head of LBS, WBS and Queens University Belfast

"Whether a leader is an outstanding researcher or just respectable is relative. It depends on where an institution is and where it wants to be. A secondtier university wishing to raise its research standing may want a first-tier academic.

The leader should represent the aspirations of the institution."

What effect might academicleaders have on faculty and university strategy?

What is the core business of a university?

What is the core business of a university?

- 1. Research and teaching
- 2. The core workers are faculty

What are the conditions under which core workers will flourish?

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If a leader has prioritized research and teaching all their life, they may know the best conditions under which other academics will develop and prosper

Managerialism in UK universities

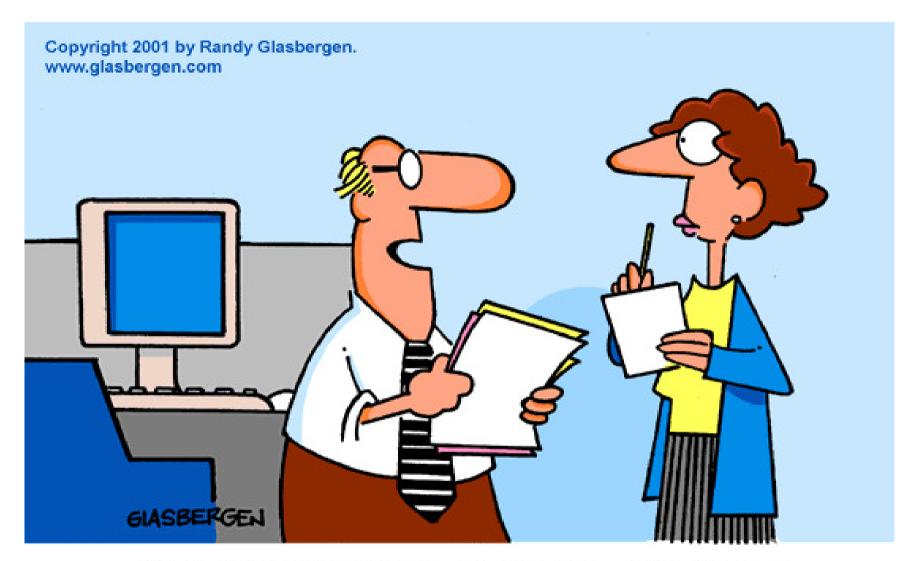
"This financial crisis is bad. We may have to lay off Andre..."



Managerialism in UK universities

- ➤ Between 2004 to 2009 the number of managers rose by 33%
- ➤ Academic staff up 10 %
- ➤ Students up 9%

Source: UK Higher Education Statistics Agency.



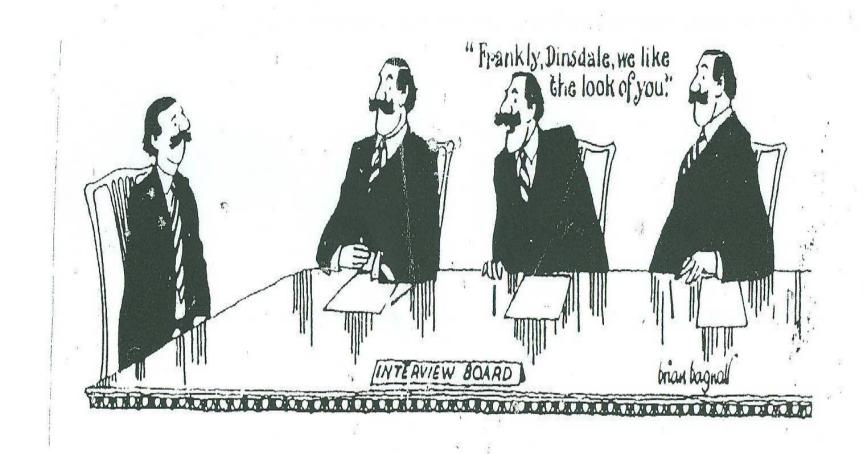
"We've got 57 team managers, 36 project coordinators, and 63 concept implementors—not bad for a company with only 18 employees!"

When a pulse survey exposes that 75% of administrative staff would recommend their university to others, but only 40% academic staff will - you know there is a problem. Why? Because the core workers are unhappy

This is a problem because

This is a problem because

Like-for-like hiring



"Frankly, Dinsdale, we like the look of you."

In conclusion

- Knowledge-based organizations should be led by experts not managers
- People who really understand the core business and the key workers

Academic leaders should also head other important bodies involved in higher education policy-making and funding

- ➤ Private trusts and foundations (e.g. Leverhulme & Nuffied Trusts)
- ➤ Higher Education Funding Council for England (HEFCE), Economic and Social Research Council (ESRC), Arts & Humanities Research Council (AHRC), Biotechnology & Biological Sciences Research Council (BBSRC)
- European Research Council (ERC) and European Institute of Innovation and Technology (EIT), among others

Thank You

This work appears in the book 'Socrates in the Boardroom' published by Princeton University Press, 2009.

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Why Research Universities
Should Be Led by Top Scholars

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