#### STROKOVNI ČLANKI • PROFESSIONAL PAPERS

# Stuart Umpleby, Ph.D. Lucy Lim

The George Washington University, Washington, DC

#### Abstract

UDC: 005.35:159.954/.955 Currently management theories and methods are spreading around the world. The development of a shared language of management and shared management practices will help managers, academics, and the process of global development. This study presents several indicators related to the spread of management theories and methods. For the thirty-six largest countries in terms of either population or GDP, we found that GDP per capita correlates strongly with business periodicals per capita, personal computers per capita, internet users per capita, and ISO 9000 certified companies per capita. The number of business schools around the world is increasing and the number of "corporate universities" is increasing rapidly.

Key words: management methods, business schools, internet, globalization, corporate universities

#### Izvleček

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Trenutno smo priča širjenju teorij menedžmenta in menedžerskih metod po svetu. Razvoj skupnega jezika menedžmenta in skupnih menedžerskih prijemov bo v pomoč menedžerjem in akademikom ter v spodbudo procesu globalnega razvoja. Ta študija predstavlja več kazalnikov, povezanih z razširjenostjo teorij menedžmenta in menedžerskih metod. Za šestintrideset največjih držav glede na prebivalstvo ali BDP rezultati pokažejo visoko stopnjo korelacije BDP na prebivalca: s poslovnimi časopisi na prebivalca, z osebnimi računalniki na prebivalca, z uporabniki interneta na prebivalca in s številom podjetij s certificatom ISO 9000 na prebivalca. Število poslovnih šol po svetu narašča in prav tako zelo hitro raste stevilo "internih univerz" v družbah.

Ključne besede: menedžerske metode, poslovne šole, internet, globalizacija, interne univerze v družbah

JEL: J21, M12, N30, I20

# THE SPREAD OF MANAGEMENT IDEAS AND METHODS AROUND THE WORLD

# Razširjenost menedžerskih idej in metod po svetu

## 1 Background

This study is based on several assumptions – that globalization, or economic development, occurs in conjunction with the spread of management ideas, that encouraging the spread of management ideas will aid globalization and economic development, and that knowledge of how management ideas are spreading will contribute to social and economic development.

After examining countries based on their population and their gross domestic product (GDP), we decided that 36 countries would include most people and most regions. These countries include the 29 largest countries in terms of population. Seven other countries – Australia, Canada, Finland, Luxembourg, Singapore, Switzerland, and Taiwan — were added because they have large GDPs and hence may have some influence in spreading management knowledge. These 36 countries include a large percentage of the world's population and the world's GDP. Data on population and GDP were obtained from www.mrdowling.com, which took the data from the CIA World Factbook.

To make the display of data manageable, we chose to group the countries into several regions.

- 1. Africa: Democratic Republic of Congo, Ethiopia, Nigeria, South Africa
- 2. China
- 3. East Asia: Japan, South Korea, Singapore, Taiwan, Thailand, Vietnam
- Europe: Finland, France, Germany, Italy, Luxembourg, Poland, Russia, Spain, Switzerland, UK
- 5. Latin America: Brazil, Colombia, Mexico
- 6. Middle East: Egypt, Iran, Turkey
- 7. North America: Canada, United States
- 8. Oceania: Australia, Indonesia, Philippines
- 9. South Asia: Bangladesh, India, Myanmar, Pakistan

Most of these regions contain both developed and less developed countries. For example, Africa contains both South Africa and Congo. East Asia contains both Japan and Vietnam. Europe contains both Germany and Russia, the UK and Spain. The Middle East contains both Turkey and Egypt. Oceania contains both Australia and Indonesia. And, of course, most countries, particularly large countries, such as China and India (South Asia), contain both developed parts and less developed parts. Creating regions with great diversity within them makes even more striking the large differences among the regions.

# 2 Difficulties in Finding Data

Much of the data we would like to have had, we could not find. We chose to study the interval 1975-2000. It was often difficult to find data for this entire period. In the case of the internet we looked only at the 1990s. Often data is available, but not in a readily accessible format. Each data element has to be collected by hand. In addition, our long list of countries makes it time consuming to get all the data on just one variable. Several variables were identified as being of interest, but no source of data was found. Examples of these variables were

number of business firms, number of business associations, number of business conferences, MBA graduates, MBA enrollment, and chambers of commerce. Some countries may have the data desired, but others not. So, comparisons were not possible.

Measuring the spread of ideas is a challenging task relative to counting physical objects such as tons of steel or bushels of corn. Usually ideas are measured through opinion or attitude surveys. However, given our limited time and budget, we searched for data already collected that would reveal some aspect of the spread of management ideas.

#### 3 Discussion of Figures

## 3.1 Population and GDP

For the global context of the spread of management theories and methods, we looked at population and GDP for the 36 countries grouped into 6 regions. Figure 1 shows the growth of population by regions. South Asia and China have both the largest numbers and the largest growth rates in the period 1975 to 2000.

The wealth of regions can be examined by looking at GDP per capita. Figure 2 shows that North America, Europe and East Asia are clearly the leaders in GDP per capita. North America had the highest GDP per capita and the highest GDP per capita growth rate in the period 1975-2000. In many countries GDP per capita has hardly grown at all, perhaps because their populations are rising so fast. The gap between rich and poor countries widened rather dramatically.

#### 3.2 Business Periodicals

Business periodicals report both good practices (successful companies) and bad practices (companies going out of business or being prosecuted). They discuss new technologies and changes in government regulations. Countries with a well-developed business press can be expected to have a more smoothly functioning business community than countries with fewer business publications.

Figure 3 shows that Europe has by far the largest number of business periodicals per capita. The explanation for the dominance of Europe in business periodicals per capita is probably the large number of languages spoken in Europe. North America, Oceania, and East Asia are similar in terms of the number of business periodicals per capita. Africa, Latin America, the Middle East, South Asia and China have the smallest number of business periodicals per capita. The source of the data on business periodicals was www.ulrich.com.

## 3.3 Personal Computers and Internet Users

Although we could have gathered data on a variety of measures regarding communication and transportation, we decided to emphasize personal computers (PCs) and the internet. We made this decision because we feel that computers and the internet are unusually effective instruments both for improving management practices and for spreading management ideas. Information technology not only makes many tasks easier but also makes advanced

methods and systems available to small companies at low cost. Computers can be used to write reports, do accounting, and manage databases. The internet is a way to communicate both within and outside the firm. One way of looking at modernizing trends within management practice is to examine the use of personal computers (PCs) and the internet.

Figure 4 shows the number of PC users in each region. Figure 5 shows the number of internet users in each region. North America, Europe, and East Asia are clearly the leaders with China growing rapidly. Data were available only since 1990. The rate of increase has been phenomenal after 1994. China, Oceania, Latin America and South Asia also have high growth rates. There has been an increase in internet use in every region. But in poorer regions the rate of growth is lower and started later.

#### 3.4 ISO 9000 Certified Companies

International standards and quality improvement awards are also ways of sharing best practices. A great deal of employee training is required in companies that apply for quality awards. Hence, one way of measuring the spread of management ideas is to examine the number of ISO 9000 certified companies by region. The ISO 9000 standard can be regarded as a globally accepted model of management. Many companies treat it as a minimum standard. That is, they will not work with companies that are not ISO 9000 certified. Figure 6 shows that Europe is far ahead of other regions in the number of companies that are ISO 9000 certified. In Europe more and smaller companies exist. Another explanation is the movement toward European integration. As companies begin to do business with an increasing number of companies, they want to know which companies are reliable business partners. Within Europe England is far ahead. Apparently there is now a law in England that makes it easier to sue a company that is not ISO 9000 certified.

A higher standard of management practice is provided by national quality awards, such as the Deming Prize in Japan, the Baldrige Award in the U.S., the European Quality Award in Europe, and the Russian Quality Award in Russia. These awards are much more selective and identify the very best companies. These companies are then used for "benchmarking." Other companies come to them to learn how to improve their processes.

# 3.5 Foreign Students Studying in the United States

One way that management ideas spread around the world is through students from other regions who study in North America or Europe and then return to use the knowledge they have gained in their home country. In particular the countries called the East Asian »tigers« benefited from people trained in the U.S. and Western Europe. These graduates brought back first hand experience in the American business environment. They also returned with ideas for macro-economic policies to create a favorable environment for business. Figure 7, Foreign Students in the US, shows that East Asia has the most foreign students in the U.S. Europe has the second largest number.

#### 4 Accrediting Business Schools

Universities do research. Academics publish their findings in scientific and popular publications. Professors change their courses to reflect recent thinking. Students graduate and use what they have learned in their careers. Faculty members also do consulting based on their research. In terms of size of bureaucracy, including universities, academic associations, conferences, journals, and book publishers, academic research and teaching is the most institutionalized method for creating and disseminating knowledge of management. However, business and management schools are greatly concentrated in North America. The fall of the Soviet Union has created a strong demand for management education in the post communist countries. Many new business schools are being established in the post-communist countries. Consequently there is great interest in establishing accrediting organizations that will help students identify which are the best schools to attend.

Figure 8 shows the number of business schools by region that are members of the Association for the Advancement of Collegiate Schools of Business. This organization used to be the accrediting organization for business schools in the U.S. It now accredits business schools around the world. Figure 9 shows the locations of the top 100 business schools by region according to The Financial Times. Figure 10 shows the locations of the top 100 business schools by country.

## 5 Corporate Universities

A rapidly growing phenomenon is »corporate universities.« Corporations set up their own »universities« or in-house training programs. Often they develop their own curriculum based on in-house process improvement examples and sometimes even their own internally developed methods of analysis. In addition consulting firms develop methods and use them in their consulting practice around the world. Corporate universities are much more job focused than conventional universities. They do not provide degrees. Their mission is up-dating the skills of employees. Much of the curriculum in these institutions is focused on process improvement, total quality management, six sigma, project management, etc.

Hence, knowledge of management can spread either through the open academic literature or through proprietary corporate training programs. Figure 11 shows the location by region of corporate university headquarters. Figure 12 shows the percentage of corporate universities two years old or younger. In 2001 over 50 percent of corporate universities were two years old or younger. Clearly the rapid growth of corporate universities is a recent phenomenon. Figure 13 shows the age of corporate universities. Less than 5 percent are more than 20 years old. Figure 14 shows the average age of corporate universities by industry. Most corporate universities serve firms in manufacturing, information technology, and professional services. Most corporate university operating budgets are small, usually less than \$5 million. See Figure 15.

## 6 Correlations

To check our assumptions about the means whereby management ideas spread, we computed correlations using Excel between several variables and GDP per capita. We used GDP per capita as a general indicator of wealth and economic activity. To simplify the task of data analysis we did not use all countries or all years. See Table 1.

Table 1: Correlations with GDP per Capita at Five Year Intervals

| Variable  | Correlation range |
|---|-------------------|
| Business periodicals per capita (1975 to 2000)    | .6571             |
| PCs per capita (1990 to 2000)                     | .7593             |
| Internet users per capita (1990 to 2000)          | .6589             |
| ISO certified companies per capita (1975 to 2000) | .2347             |

In each case the correlations were positive and increased during the period of observation. Business periodicals and ISO 9000 certified companies were observed between 1975 and 2000. Internet users per ten thousand people and PCs per ten thousand people were observed between 1990 and 2000. The lowest correlation was between ISO 9000 certified companies and GDP per capita. These latter correlations rose from .23 to .47. Correlations between business periodicals per capita and GDP per capita rose from .65 to .71. Correlations between PCs per capita and GDP per capita rose from .75 to .93 between 1990 and 2000. Correlations between internet users per capita and GDP per capita rose from .65 to .89. Hence, technology has the highest correlation to wealth of countries. Business periodicals per ten thousand people has a fairly high correlation to wealth. ISO 9000 certified companies per capita has the lowest correlation, but it is still positive.

In each case the wealth of countries, as measured by GDP per capita, is associated with business periodicals, PCs, internet use, ISO 9000 certification, university business programs, and corporate universities. Creating these institutions in developing countries seems likely to help them to develop further.

# 7 Policy Issues Regarding Management Education

One reason why management education is concentrated in North America is that Americans value practical knowledge whereas Europeans place a higher value on theoretical knowledge. In Europe there has been great interest in recent years in the book, *The New Production of Knowledge*, published in 1994. It claims there are two types of knowledge. Mode 1 knowledge is theoretical knowledge which is usually developed and taught in universities. Mode 2 knowledge is practical knowledge, which is often developed and shared within corporations. Perhaps the reason why this book has been so popular in Europe is that it gives a theoretical explanation for why practical knowledge is important.

Another issue is whether academic management research aids business managers. The December 2001 issue of the *British Journal of Management* was devoted to the topic of a prelevance gap.« The journal addresses the claim that much

# Appendix

Figure 1: Population

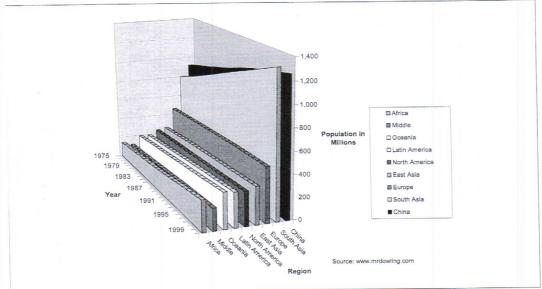


Figure 2: GDP per Capita

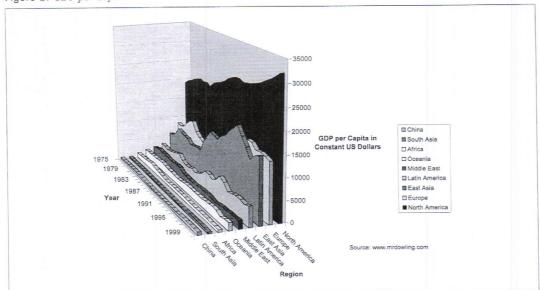


Figure 3: Business Periodicals

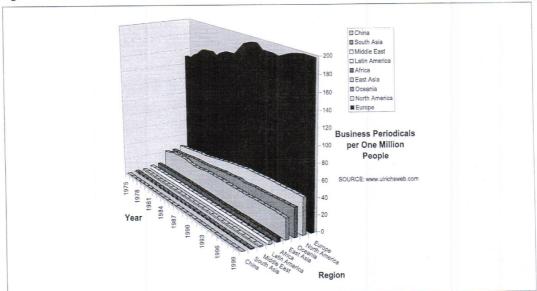


Figure 4: Number of PC Users

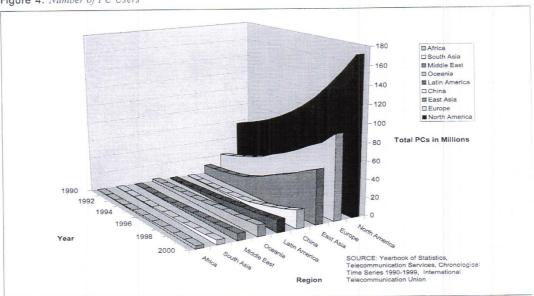


Figure 5: Total Internet Users

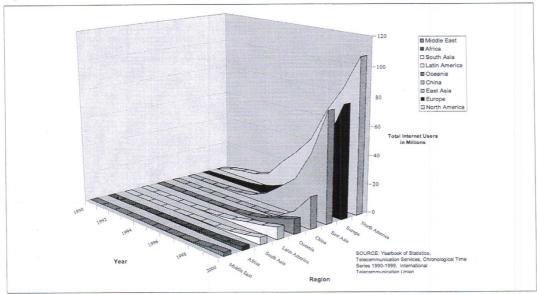


Figure 6: ISO 9000 Certified Companies

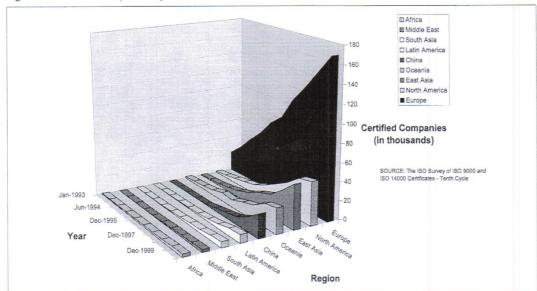


Figure 7: Origins of Foreign Students in the USA

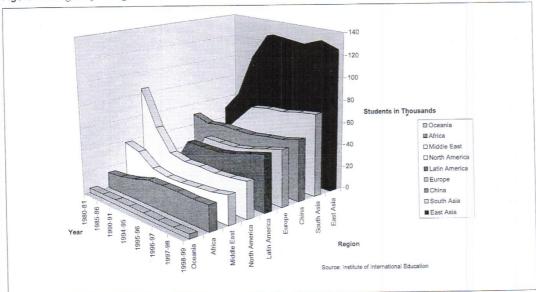


Figure 8: Business Schools in AACSB by Region

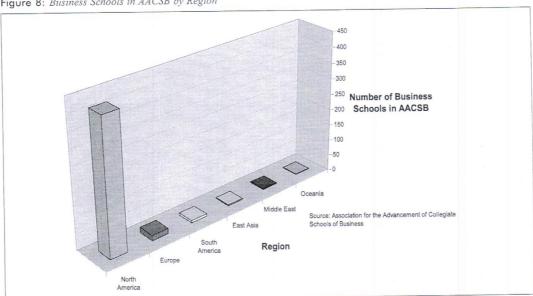


Figure 9: Location of Top 100 Business Schools by Region

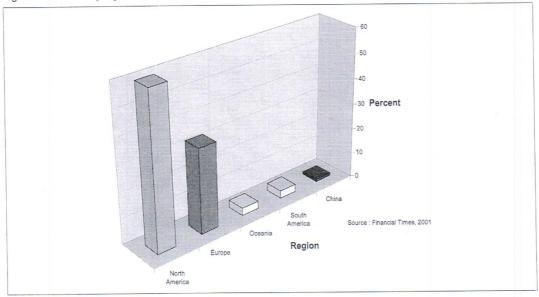


Figure 10: Location of Top 100 Business Schools by Country

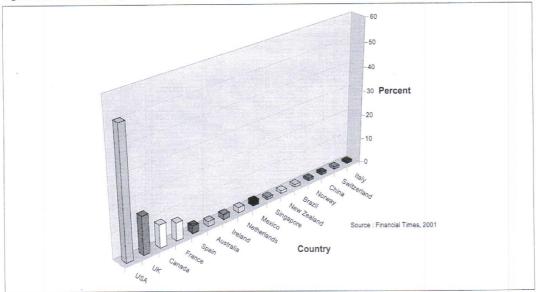


Figure 11: Corporate University Headquarters Locations by Region

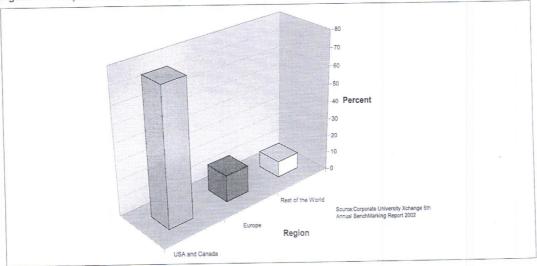


Figure 12: Percentage of Corporate Universities Two Years Old or Younger

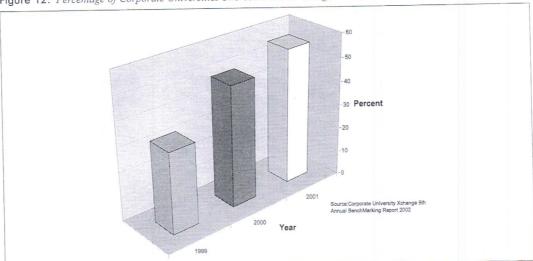


Figure 13: Age of Corporate Universities

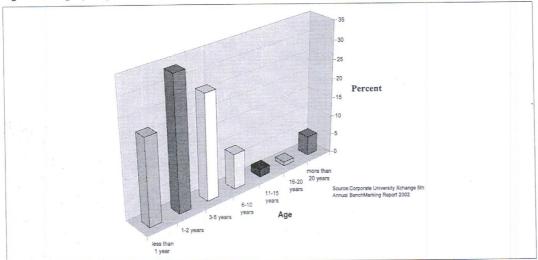
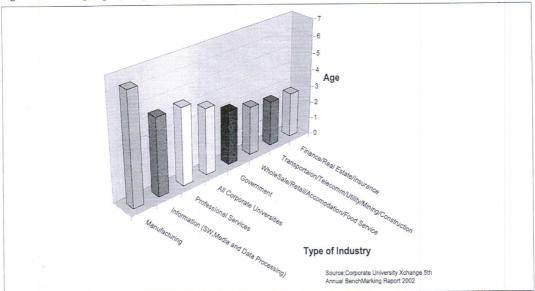
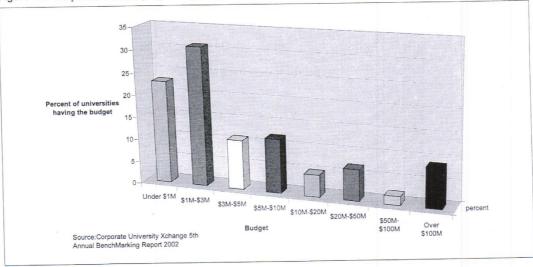


Figure 14: Average Age of Corporate Universities by Industry







academic management research is not used by business managers, and that topics important to managers are not being addressed. This subject has been debated in business schools for many years. Perhaps a shift of emphasis from theories to methods will reduce the relevance gap (Umpleby, 2002).

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