Weaving the Western Web[♦]
Explaining Differences in Internet Connectivity Among OECD Countries

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ABSTRACT

Despite the Internet's increasing importance, there is little social scientific work that addresses its diffusion. Our knowledge is especially limited with respect to the conditions that encourage its spread across nations. This paper takes a first step in explaining the differences in Internet connectivity among OECD nations. The empirical analyses show that economic wealth and telecommunications policy are the most important predictors of a nation's Internet connectivity.

The Internet is a major technological innovation of the 20th century with key political, social, and economic consequences. Politically, the Internet is expected to revive participatory democracy (Anderson et al. 1995, Naisbitt 1982, Deaken 1981, Rheingold 1993, Geser 1996) and has even been used as an indicator of a country's level of democracy (Anderson et al. 1995). Socially, the new medium is expected to act as a moderator of inequality by making low-cost information available to everyone without discrimination (Anderson et al. 1995, Hauben and Hauben 1997). Yet, others have argued that the technology contributes to increasing inequality because research has shown that people use the Internet as a complement to traditional media rather than a substitute for them, thereby increasing information gaps across the population (Robinson, Barth and Kohut 1997, Robinson, Levin and Hak 1998).

♦ I would like to thank Marta Tienda, Miguel Centeno, Bruce Western and members of Princeton University's 1998/99 Sociology Empirical Research Seminar for their extremely helpful comments on earlier drafts of this paper. I would also like to thank Tim Kelly and Ben Petrazzini for their help in locating data.

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The medium is also contributing to a change in education both locally and globally. At the local level, through its implementation in an increasing number of classrooms for various day-to-day projects, globally through facilitating distance education (Ri, Sung, and Lim 1998, Simard, Lopez and Fofana 1998). The network is also expected to have a significant effect on scholarship by facilitating international cooperation and integrating scientists from geographically peripheral areas into mainstream discussions (Klensin and Bush 1993).

Recently, the commercial aspect of the network has become the most visible. Commercial enterprises on the network have skyrocketed in the past three years, with an increasing presence of commercial ventures and a boom in online economic transactions reaching into the billions of dollars. The network offers new opportunities not only for businesses, but also for individual consumers by allowing easier access to direct sources, and also facilitating such transactions as online auctions (Kelley 1999).

Although several of the above mentioned positive claims have been contested (Calhoun 1998, Etzioni 1992, Stoll 1995), the far-reaching impact of the Internet is incontroversial. Despite its overarching importance, little attention has been devoted to the study of its spread, especially on an international level. Given the potential wide-ranging effects of the technology, the level of diffusion in a country can influence the degree to which a country can hold its place in the global economy. This paper explores what circumstances explain international variation in Internet connectivity among the member countries of the Organization for Economic Cooperation and Development (OECD).

In the next section, I provide a brief background of the Internet with particular emphasis on its recent exponential growth. Then, I summarize relevant literature on communication technology diffusion that leads to testable propositions. The data and

methods section presents details of the data set and modes of operationalization. That section is followed by a discussion of findings and a conclusion that also highlights avenues for future research.

BRIEF BACKGROUND

The Internet is a world-wide network of computers, but sociologically it is also important to consider it as a network of people using computers that make vast amounts of information available to users. Given the two services of the system - computer-mediated communication and information retrieval - the multitude of services allowed for by the network is unprecedented. Although the system was first implemented in the 1960s, it was initially restricted to a small community of scientists and scholars in just a few nations. Moreover, the World Wide Web, — the key aspect of the Net concerning its wide popularity — was invented only in 1991 and the graphical interface that made its use accessible to the layperson, the Web browser, was created only in 1993. It was this addition to the technology that significantly accelerated its spread both nationwide and internationally. Thus, significant Internet diffusion can be observed worldwide only in the past few years.

Similar to infrastructure innovations of the past such as railroads and the telegraph, the Internet contributes significantly to the convergence of space and time by making various types of communication – regardless of geographical proximity - quicker than ever before. The ramifications of this spatio-temporal convergence are profound and not well understood because no previous technology has embraced and allowed for as many communication services as the Internet. Since knowledge-intensive activities are an increasingly important component of OECD economies (Reich 1992), exploring the spread of the network that many such activities are coming to embrace and depend on is

imperative for understanding which nations will be able to further these sectors of their economies the most. The presence of the Internet in a society may create new economic activities and jobs, and may also allows for potential improvements in social benefits by offering new educational opportunities, improving health care delivery, and access to cultural and leisure activities (OECD 1997a). Given such potential wide-ranging consequences, the Internet's level of diffusion in a country can influence many of its economic and socio-cultural spheres.

During the last five years, the rate of growth in the network's global diffusion has exceeded fifty percent annually (Network Wizards 1998.) Between the years 1994 and 1998, the use of the system more than quadrupled in the United States to include between 30 and 35 percent of Americans over the age of sixteen (Kohut 1998, Commerce Net 1998.) The system has seen similar popularity in several other nations such as Finland, Sweden, New Zealand, and Australia. However, other nations have been much slower in embracing this new technology. Existing literature is often descriptive about diffusion data (Paltridge & Ypsilanti 1997) without looking at the relative importance of indicators in explaining connectivity. Alternatively, it only focuses on the impact of information technologies on the economy, ignoring the conditions that shape the particular information technology landscape in a given country. Although some literature does exist regarding the Internet's unequal spread to lesser developed nations (Goodman et al. 1994, Hargittai 1996, 1998, ITU 1997, Press et al. 1998, Rai et al 1998, Rao 1995), there has been surprisingly little discussion of the Internet's unequal spread among developed countries

By concentrating on a group of nations with an approximately similar level of social and economic development, i.e. the OECD, it is possible to examine the more intricate details influencing the spread of the medium. The OECD is an ideal case for

attempting to understand the details leading to differences in international Internet diffusion among countries of approximately similar socio-economic development. The members of the organization represent advanced capitalist countries and thus membership controls for a general level of development. In this case, the top-tier nations – as classified by the UNDP Human Development Report – of the high development level category are examined. This paper fills a gap in the literature by exploring what factors explain the level of Internet connectivity among OECD countries.

THEORETICAL CONSIDERATIONS

In this section, I summarize existing literature about important predictors of Internet connectivity, highlighting findings about the diffusion of technologies, with particular emphasis on communication technologies. I also discuss how the economic situation of a country, the education level of its inhabitants, the institutional legal environment governing communication technologies, and existing communication technology infrastructure may be related to the question of Internet connectivity.

Some studies have attempted to explain differences in international Internet connectivity generalizing to the entire global landscape. Using measures from the United Nations Development Programme's Human Development Report, Hargittai (1996, 1998) found that a country's human development level is correlated with its level of Internet connectivity. The Human Development Index uses information on adult literacy rate, education, Gross Domestic Product, and life expectancy to create an index of countries' level of development. The ITU (1997) used the same measures and found a similar relationship between the two variables. The limitations of these studies lies in the fact that they only include one overarching measure which leaves little room for

understanding the specifics of what factors lead to differentiated Internet connectivity. Moreover, the analysis cannot isolate explanatory factors among countries of similar development levels. The conclusion that general level of development influences Internet connectivity does not differentiate among countries with similar levels of development. Kelly and Petrazzini (1997) included more variables, such as information on connectivity prices and language in addition to wealth and education, in their discussion of differentiated connectivity levels. However, their methods were restricted to simple correlations between two variables at a time. Thus, their findings do not provide a more comprehensive understanding of what factors determine a country's level of network connectivity. Nonetheless, the analysis does suggest that wealth, education, language and pricing are important correlates of Internet connectivity.

Most relevant to the study of the Internet's global spread is work done on macro-level diffusion processes. Fischer and Carroll (1988) examine the diffusion of the telephone and automobile in the United States from 1902-1937 on a state level. They use longitudinal data and characteristics of the states to understand what accelerated or slowed the process of telephone and automobile diffusion. They find that higher commercial development in an area adds to the telephone's spread. Moreover, a country's overall economic strength will affect Internet diffusion in that the necessary resources are more likely to be present, and capital required for the expansion of the technology is more available, in richer countries. Another economic factor that influences Internet connectivity is the level of inequality in a country. The more egalitarian, the more people will be able to afford the new technology, thus increasing the probability of a high level of diffusion.

There are two ways in which the level of human capital is relevant to Internet connectivity: the population's level of education and its English language proficiency.

Most studies that have examined the education level of adopters of new technologies find that more educated people are quicker to adopt new innovations than people with comparatively less education (Rogers 1983). In the case of the Internet's global spread, this suggests that countries with better educated populations will be more likely to show higher rates of Internet diffusion than nations with less educated citizens. Kelly and Petrazzini (1997) also suggest that academic institutions often play an important role in spreading the Internet, providing another reason for considering the education level of a nation's population in understanding the necessary and sufficient condition for Internet connectivity.

Individual knowledge may affect the spread of a communication technology in yet another way. Laponce (1987) suggests that some languages have greater status than others and they dominate certain areas of life. Such is the prominence of English in the computer industry and even international media sphere. Weinstein (1983) argues that English is especially dominant in the realm of international communications. Barnett (1995) claims that English is so important in some areas that not speaking the language leads to a serious barrier in access to telecommunications technology. Given the prominence of the English language on the content of the World Wide Web, level of English proficiency may affect the number of people interested in using the medium. The prominence of English on the Web is not due to a higher rate of diffusion in the United States, but the relative size of U.S. population compared to other countries. Because English is the major international language linking people of different origins (Fishman, Cooper and Conrad 1977), even non-Americans on the Web may contribute to English content as long as it is directed at viewers from other nations. There is evidence that the U.S. dominates content on the Web with 94 percent of the 100 most visited Web sites being created and located in the United States (Cukier 1999). Overall,

the two aspects of human capital relevant to Internet connectivity are education level and familiarity with English.

The institutional legal environment in a country is also relevant to the Internet's spread because national policies can enhance or hold back diffusion of a technology, depending on their approach to regulating mechanisms, privatization, and free competition. The Information, Computer and Communications Policy Division of the OECD's Directorate for Science, Technology and Industry has published several reports advocating the importance of free competition in the telecommunications sector (OECD 1997a, 1997b, 1997c). The International Telecommunications Union has contributed to the literature in similar ways (ITU 1997). These reports suggest that free competition in the telecommunications sector will improve the options for telecommunications services and reduce the price of access charges. These arguments suggest that countries with free competition in the telecom sector will have higher Internet connectivity. To address these hypotheses, information on the telecommunications sector and on Internet access charges is included in the analysis.

In his work on the diffusion of the telephone in Germany, Thomas (1988) found that the spread of technology is contingent upon certain technological and infrastructural factors present in the target nation. Kelly and Petrazzini (1997) also emphasize this point when explaining the large differences between connectivity among countries of different income categories. With respect to the Internet, existing telecommunication facilities can be expected to have a large impact on the spread of the Internet.

In sum, the review of related studies identifies several important factors in the discussion of international Internet connectivity and suggests the following testable propositions. Larger economic wealth and a higher level of economic will lead to higher connectivity, whereas larger inequality is likely to have an opposite effect. A country

whose population has high levels of education is likely to be more densely connected than a country with lower levels of general education. English language exposure will influence connectivity by favoring native speakers most, followed by countries with populations exhibiting high levels of English training, and discriminating most against populations with low English exposure. Free competition in the telecommunication sector will have a positive effect on Internet density while telecom monopolies will impede the network's spread. Lower prices will act as a catalyst for network diffusion. Finally, claims based on the importance of existing telecommunications infrastructure predict that telephone density affects Internet connectivity positively. The following section presents the data and methods, and is followed by a discussion of these propositions based on empirical results.

DATA AND METHODS

The study includes 18 member countries of the OECD.[1] The unit of analysis is the nation-state. As *Figure I* shows, there is considerable amount of variance in Internet connectivity among OECD countries to warrant exploration and explanation. Data were collected from various sources on the aggregate country-level. (See *Appendix I* for details about the sources of the data set.) Data are lagged: the outcome variable is reported in 1997 figures, whereas explanatory variables are reported for 1994-1996 (depending on availability) with the exception of the Gini coefficient, which is only available for earlier years (see *Appendix I* for information on specific years).[2] The lag in the data is necessary

[1] Although every attempt was made to include all 29 member countries of the OECD, due to lack of data on several important variables, only 18 countries could be included. *Appendix II* presents some demographic information about these countries.

[2] The use of earlier figures as inequality measures is not a serious problem because level of inequality does not change quickly.

because the question involves explanatory variables for diffusion and attempts to understand what country attributes lead to adaptation of the Internet.[3]

Outcome variable.

Internet connectivity is measured as number of hosts per 10,000 inhabitants where hosts are individual computers with network access. Because multiple users may use a single host computer, this is not a measure of number of users, and can be regarded as the most conservative measure of Internet presence in a country.[4] One can only estimate the number of users from information about hosts, but, unfortunately, such estimates are much less reliable than host count measures and no such systematic measures exist. Therefore, host count is the most precise available data on the presence of the Internet in a country (OECD 1998). *Figure I* presents information on the outcome variable in hosts per 10,000 inhabitants and shows that there is considerable variation in the number of hosts per country. Since the outcome variable reveals a somewhat skewed distribution, it was logged for the regression analyses in order to make the outcome variable more linear and meet the assumptions of the OLS regression analysis.[5]

Explanatory factors.

Characteristics of the countries are explored with respect to their economic situation, human capital, related institutional legal environment, and existing technological infrastructure. Gross Domestic Product is used as a measure of economic

[3] Studies of diffusion often look at data over time in order to include the rate of diffusion in the model with special importance attributed to the starting point of the diffusion. Lack of sufficient data on predictor variables made over-time analysis in this case impossible.

[4] There is no systematic information available on the number of users per host across nations. See the section on Discussion and Conclusion for information on how this lack of data applies to the findings of this study and its implications for future research.

[5] I experimented with different scales for the dependent variable for performing the log transformation and the results are robust. The regression results are only discussed with respect to standardized coefficients so the log transformation does not affect the discussion of the outcome.

wealth. The Gini coefficient represents for a country's level of inequality.[6] General level of education was derived from the UNDP's Human Development Report and stands for combined first-, second-, and third-level gross enrollment ratio. English language proficiency was coded as dummy variables. Its values are derived from information about the percentage of students in general secondary education learning English as a foreign language. Countries where English is the dominant language were coded as Native speakers and represent the baseline, whereas all others were split into high and low English proficiency (see *Table 1* for details).

Telecommunications policy was also coded as a categorical variable. Countries with free competition constitute the baseline. Countries that have duopolies or have free competition in either long distance or local services were coded as duopolies. The third dummy represents countries that have monopolies in the telecommunications sector. The cost of a twenty hour monthly Internet access basket is used to indicate pricing. Existing telecommunications infrastructure is measured by information on phone density. This composite variable was constructed by including information on both mainlines per 100 inhabitants and cellular phone subscribers per 100 inhabitants.

Results obtained from OLS regression analyses are used to assess the importance of the explanatory factors on explaining the variation in Internet connectivity among OECD countries. *Table 1* presents descriptive statistics for all the variables. *Appendix III* presents a correlation matrix for the outcome and all explanatory variables. Although several variables are significantly correlated, the correlation coefficient is rarely prohibitively high. The highest correlation among the predictor variables concerns the relationship of telecommunications policy and phone density yielding a correlation

[6] Gini coefficients are difficult to collect, represent measures for varying years, and the data source acknowledges the questionable quality of some of the figures (Deininger and Squire 1996). Nonetheless,

coefficient of -0.719. The strength of this relationship is not surprising given that telecommunications policy can have a direct impact on phone density. Free competition in the telecom market can be expected to encourage phone diffusion in contrast to the hindering effects of a telecom monopoly. Given the high value of the relationship between these two variables, their inclusion together in one model should be done with care.

FINDINGS

Table 2 presents the results of OLS regression models. The first set of models (Models 1-4) show the individual explanatory power of the hypothesized variables. The second set of models (Models 5-8) address the impact of the variables in relation to other explanatory factors. These nested models are presented with respect to propositions suggested in the above review of the literature. Model 5 considers the hypotheses regarding the effect of human capital indicators – general level of education and English language exposure – on Internet connectivity. Model 6 looks at the additional importance of telecommunications policy in explaining the level of Internet spread in a country. Model 7 explores the significance of existing telephone infrastructure. Finally, Model 8 is presented to demonstrate that having both policy and phone density measures in the model does not add to the model's explanatory value.

It is clear from Model 1 that among rich nations, economic factors alone do not explain the level of Internet connectivity. The variance explained is extremely small (adjusted R^2 = .031). Adding information on human capital (Model 5) – both level of education and English language proficiency – significantly improves the fit of the model

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they are the only available source of income inequality. The quality of the data must be kept in mind when interpreting the effects of this variable.

(F-test significance = .048). However, adding information on policy (Model 6) adds even more to the fit of the model reaching an adjusted R^2 of .680 with a value of .026 for f-test significance. Model 7 does not include information on telecom policy, however, adds information on phone density. The significance change (.016) from Model 5 to Model 7 shows that the fit of the model is significantly improved by this addition. However, the obtained adjusted R^2 is lower than the one obtained in Model 6 (.595 vs. .680) suggesting that the latter has a better overall explanatory value. As stated earlier, because of the high correlation between telecom policy and phone density, including both in the same model will probably lead to questionable results. As Model 8 shows, the fit of the model is not improved significantly by inclusion of both variables (f-test significance = .879), moreover, there is a decline in the adjusted R^2 value (.641) with respect to Model 6. In light of these findings, Model 6 warrants detailed discussion.

Economic wealth of a country is a significant predictor of Internet connectivity. Moreover, the .520 standardized coefficient value suggests that there it has a strong positive effect on the outcome variable. Therefore, there is evidence for the proposition that larger economic wealth translates into higher level of network connectivity. The Gini coefficient does not show significance, but given the small sample size in the model (N=18), it is hard to solely depend on the significance values of the individual indicators. Examining the direction of variable effects can also be revealing with respect to their explanatory importance regarding the outcome variable. The Gini coefficient shows a low standardized coefficient value of .174. Although it is in the unexpected direction, one must be especially careful in giving too much weight to this variable for the data reliability issues mentioned above in the Data and Methods section. A negative effect was expected, because it was hypothesized that a country with low inequality among its population (signaled by a low Gini coefficient value) would have a higher level of

connectivity than a country with relatively larger inequality. There is no support in the data for this proposition.

When information on human capital – education level and English language proficiency – was added to the simple model containing data on economic factors only, it contributed significantly to the explanatory value of the model. However, by adding policy to the equation, the effects of both education and language competency disappeared. Not only are they not significant, but both represent a fairly small value. Nonetheless, the positive value of high English proficiency is contrary to the expected direction of this effect since it was hypothesized that a native English speaking population would have the highest impact on Internet connectivity. Rather, it seems that having a population of native speakers versus good English speakers does not make a difference. Moreover, the standardized coefficient for low English proficiency is extremely low (-.044) showing that not being good at English also does not have an impact on connectivity.

Indicators of telecommunication sector – policy and price values – are found to be the most important element of the puzzle. The existence of a monopoly in the telecom sector of a nation has considerable negative effects on that country's Internet connectivity. Not only is the value significant ($p=.001$), but it has a large standardized coefficient value of -.706. Interestingly, price is not significant and has a very small β value (-.089). This is probably due to being accounted for by the policy variable. This suggests that telecom policy is not only related to directly making Internet services available to users through encouraging affordable pricing, but it also has a broader effect on contributing to the development of the necessary telecommunications infrastructure of a country that facilitates easier access to connectivity.

Overall, the results show that GDP and especially telecommunications policy are important predictors of a country's level of Internet connectivity.

DISCUSSION AND CONCLUSION

There are several implications of the above findings. First of all, it is important to recognize that the current spread of the Internet indicates that even among the richest countries of the world, general economic strength does matter in predicting Internet connectivity. This is important to keep in mind when making overarching optimistic claims about the Internet's potential role in eliminating international differences. The finding about the importance of telecommunication policy suggests that if governments are interested in keeping afloat an increasingly knowledge-intensive economy with a large reliance on information, they need to consider the implications of their telecommunication policies.

The aggregate-measure quantitative analyses give us a good sense of the overarching explanatory factors regarding countries' Internet connectivity in OECD nations. However, the quantitative aspects discussed so far need to be supplemented by qualitative information about country-specific attributes that may also affect connectivity. Of particular interest to this paper is the parallel topic of telephone diffusion that was explored by Rammert in his paper comparing the telephone's diffusion in the U.S., France, the U.K. and Germany (Rammert 1990). His departing premise is that the rate of telephone diffusion across these societies was very different in the first years of the diffusion process despite the fact that all four of these countries were similar in their industrial advances and available capital. Therefore, Rammert argues that cultural considerations need to be examined to understand how the telephone was first perceived, how it fit the lifestyles of a society, and thus, how it was

adopted. In the United Kingdom, for example, face-to-face encounters in business dealings were essential in determining the other party's social status. Because such information was paramount for business transactions, adapting to business interactions over the phone was difficult. In contrast, Rammert argues that the entrepreneurial spirit characteristic of the United States at the time was much more conducive to incorporating the telephone in everyday life. Although the article only contains descriptive statistics, the author's observation about affinity towards the use of a technology may be relevant to understanding differences in Internet diffusion among countries of similar levels of development.

Currently, few systematic studies exist on people's use of the Internet with such basic questions left unanswered as to what proportion of Internet use involves computer-mediated communication services (e.g. e-mail) as opposed to information retrieval use (e.g. Web browsing). We know even less about how people incorporate these specific services into their lives and what previous activities they substitute or complement with network applications. Once such information becomes available, it will be possible to incorporate cultural aspects of Internet use into the study of the network's diffusion across nations. However, even when such data become available, they may not be the type that can easily be included in a statistical equation justifying the inclusion of qualitative descriptions of country specific approaches to the technology. I now present some cases that draw on the above findings to explain the Internet connectivity of a nation complimented by country specific information that is not possible to quantify for inclusion in the regression analyses.

Figure I shows Finland's striking position in the diffusion hierarchy as being by far the most wired nation. Information on telephone density also underlines Finland's strength with respect to communication technologies. Although economically Finland

does not stand out among the group of countries included in this study, it does have a strong welfare state. Its population is well educated and the level of English proficiency is quite high. Finland is one of the few European nations with open competition in its telecommunications sector that has been present for several years. This is probably the reason for Finland's Internet access charges being among the lowest across the population of country's included in this study. Moreover, the Finnish government initiated a national information society strategy as early as 1994 leading to the full time connectivity of all higher education institutions and the majority of government organizations (Mosaic 1998). The country is also host to a major player in the telecommunications equipment industry (Nokia) supplying local know-how and equipment to encourage the spread of the network.

The position of France on the connectivity hierarchy is surprising in the opposite direction. Although the country has internationally recognized research institutions in the field of information technologies (e.g. INRIA), the nation has been slow at gaining widespread connectivity to the Internet. Although economically similar to Finland, it is a country with ten times as many inhabitants with a weaker welfare state leading to more overall inequality. In contrast to the Finnish government's early efforts in playing an active role regarding the creation of a national information infrastructure, France's leaders have done little to encourage the spread of the Internet. Not until 1997 did a top official express support of the technology (Giussani 1997). However, Prime Minister Lionel Jospin was also quoted as saying the following: "I am convinced that solutions cannot be imposed on society from the top down." which makes one question the efforts the French government is willing to take in promoting the spread of the Internet.

All of this is not to say that French citizens are not networked. Since 1982, the French have had their own national network; the videotext system called Minitel. It

provides users with many of the services currently available on the Internet. However, it does so on a text-based system (no graphics.) Moreover, it is an isolated network that does not have any international connections so its proliferation cannot be easily translated into high level national Internet connectivity, rather, it can be argued as an impediment to that process. France's telecommunications policies also do not encourage the diffusion of the Internet. Monopoly in the telecom sector has restricted competition and has kept Internet access charges high. Moreover, France has had a strict approach to policies regarding national security with respect to encryption software, which has added to the slow spread of the Internet (Fletcher 1998, Giussani 1997). There have also been instances where hostility toward English dominance on the Internet was openly expressed. Such was the case with a lawsuit filed against Georgia Tech University for hosting a Website in France without providing a French version (Giussani 1996). If such views reflect general sentiment, it is not surprising that few French have been eager to connect to the English dominated medium.

As the examples of Finland and France show, national specifics need to be considered when assessing the full range of issues that affect the Internet connectivity of a nation. Nonetheless, the findings of the quantitative analysis in this paper provide a basis for what aspects are necessary to consider overall, in addition to possible other factors.

The macro-level analyses presented above should eventually – when such data become available – be supplemented by more detailed information on national diffusion patterns. Future research needs to examine specific implementation and use in more detail. Whether there is an equal distribution of technology in a country may significantly affect its final impacts for that society. Although host distribution is a good raw measure of Internet connectivity, once data are available, it should be complemented

by information on the number of users, the quality of connectivity and its distribution among the population. With respect to individual characteristics, information on age, socio-economic status and political affiliation may tell us more about how a nation's population is adopting the technology. Now that we have a sense of what overarching factors explain the network's international diffusion, we can start focusing in on the particularities in order to have an even better understanding of the process.

Documenting the level of connectivity across long-standing democratic societies is a first step in understanding the potential global impact of the Internet. The findings can be used to guide research on network diffusion to other areas of the world, although data availability problems make this a difficult task at the present. By identifying the key predictors of Internet connectivity among OECD countries, this paper has set the agenda for more detailed analyses regarding this important social phenomenon of our times.

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