

publications carries a cost in terms of freedom of the press.

As for the views expressed in *Chakravarti* about the way meaning is extracted from media reports, Kirby J's views should be - with respect - of great concern to the media. While his was only one voice

among five, given the strong terms in which he doubted the correctness of what was thought to be a firmly entrenched principle, the failure of his brethren to elaborate on this point is to be regretted. It is difficult enough for the media to employ irony or satire and remain within the bounds of the law of defamation

without being held responsible for defamatory meanings arising in the mind of a reader glancing over the shoulder of another at a headline or simply looking at the pictures.

Anne Flahvin is an Associate at Baker & McKenzie and teaches law part time.

E-commerce and Mankind's Last & Greatest Hope on Earth

Ira Magaziner, President Clinton's Special Advisor for policy development for the Internet outlines the issues facing e-commerce, the development of the Internet and the principles governments' should adopt to deal with them.

I would like to talk to you about a study that we released in the United States which documents the impact that information technology and electronic commerce are already beginning to have on our economy.

We have had quite a good economy in the United States these past couple of years, and what we have found is the building out of the Internet - which has gone from four million users to about a hundred million users - already accounts for about a third of the real growth of the US economy.

THE IT INDUSTRY

Information technology industries have gone from 4 to 8 percent of our economy in the past decade, even though prices in those industries have fallen dramatically. And when you look at just the direct contribution of these industries to our economic growth, they account for over a third of our real economic growth, not including any indirect effects.

IT industries are also creating significant jobs. We now have over seven million information technology related jobs in the United States. On average, those jobs are paying about \$46,000 a year, compared to an average of only \$28,000 a year for private sector jobs in the US economy, meaning the jobs being created are high wage jobs.

We are also finding now that 45 percent of all business equipment investment in the United States is in information technology, up from 3 percent just fifteen years ago.

THE GROWTH OF THE INTERNET ECONOMY

The development of the building out of the Internet has given new life to the information technology industries, and that is now giving our economy a significant boost. As the Internet goes from having a hundred million people to a billion people over the next decade, we think the importance of information technology industries in our economy is only going to accelerate.

In addition to the information technology industries themselves, we have this new phenomenon of electronic commerce which only began a couple years ago. It is just beginning to have an impact but the impact is dramatic. When we speak about electronic commerce, we mean a couple of things. The first is business-to-business use of electronic commerce. These are cases where companies' purchasing, supply team management, inventory, management, customer relations and logistics are made available on the Internet.

That piece, we now believe, will grow from \$6 billion to \$300 billion by the year 2002 just in the United States alone. I think the reason why there is so much disparity seen among projected growth figures for the Internet is the projections themselves become outmoded after three or four months. As we have observed over the past couple of years, they have to be adjusted upward because things are growing so quickly.

BUSINESS-BUSINESS

We think these business-to-business applications will grow to over \$300

billion in the United States alone. Companies like General Electric that just went on to the Internet about a year ago already are doing about a billion dollars in business-to-business commerce. They're realizing significant productivity improvements and, therefore, driving the use of e-commerce throughout their corporations.

Not including sales to consumers, GE alone expects to do \$5 billion of business on the Internet by the year 2000 in business-to-business commerce doing things like putting its purchasing online. You'll hear similar reports from companies like Cisco, Federal Express and IBM and they too are experiencing very dramatic growth rates. These growth rates are now spreading throughout the economy because the productivity improvements of business-to-business commerce are so great.

RETAIL OF GOODS VIA THE NET

The second area of electronic commerce - which has grown much more rapidly than any of us predicted - is the retailing of physical goods. That is where the sale is made on the Internet but the goods are then physically delivered to the buyer. I'm sure you're all aware of the stories about how the Internet has changed the way people buy books, automobiles, flowers, clothing and a whole range of other products.

Amazon.com, for example, went from selling \$16 million in books its first year up to a \$150 million company its second year. Its major competitors are now going online as well. By the year 2000, we

expect close to 20% of all books sold in the United States to be sold online. We're seeing similar growth across a whole range of other product areas.

DIGITAL DELIVERY

The third area of electronic commerce which is just beginning but will eventually be the largest area, is the digital delivery of products and services across the Internet, where the sale and the delivery is made on the Internet. We're seeing already this in the actual sale and delivery of software. Eventually it will spread to music, movies and video games.

We're seeing this type of e-commerce in other areas such as:

- financial services, where we expect over a billion dollars of insurance policies to be sold and delivered on the Internet;
- banking, where we expect about fifteen million Americans will be doing their retail banking online within a year or two;
- areas like professional business consulting, engineering consulting, educational services, medical diagnostic services, news services and the like,

all of which will be sold and delivered across the Internet.

MERCHANDISING

A final area has to do with the creation of a new series of businesses which are revolutionizing direct marketing and advertising. These are companies where affinity groups have come together and then created a good pool of customers for merchandising.

For example, when we released our strategy at the White House last summer, a representative from a company called "Parent Soup" was present. Parent Soup began as a discussion group of new parents who found themselves up at odd hours of the night and started talking with each other over the Internet. It formed into a business which is growing at over 300% a month and has brought together now almost a hundred thousand parents.

Now another business of merchandisers is interested in selling products to new parents going online. They pay for advertising and sell consulting services

and advice to new parents who have questions about health care and other issues. Something similar is happening in the gardening industry between gardening businesses and people who like to grow flowers, as well as a variety of other industries. We think this new type of direct marketing business will also experience much growth.

Now the sum total of all this - the building out of the Internet, the information technology industries, the business-to-business e-commerce, the online retailing of physical goods, the development of digital delivery services and these new kinds of marketing businesses - could well drive the growth of the world economy for the next quarter-century if we can set the right framework for it to occur.

Because it will drive and affect all sectors of the whole economy, we do not think it is hyperbole to say that its impact will be as great as the Industrial Revolution.

In order to realize this potential, we believe certain issues must be addressed in order to facilitate the development of the Internet and we've identified nine of these key issues. There are also five

principles that we think ought to be kept in mind as we go through these nine issues.

PRIVATE SECTOR LEADERSHIP

The first principle is the private sector should lead the growth of the Internet, not governments. The Internet should develop as a private sector-led medium and even where collective action is necessary, private collective action should be preferable to government regulation.

The reasoning behind this principle is not ideological. We're Democrats. We believe in government in the United States. But we believe that the Internet moves too quickly for governments. Governments inherently are too slow and too bureaucratic for the pace of the Internet. Therefore, private collective action can be more flexible and faster-moving than government regulation.

MARKET DRIVEN MEDIUM

As a second principle - and this is a particularly important one - we think this



should be a market-driven arena, not a regulated arena. There are two models that one could think about for the development of Internet commerce. The first model is what I would call the traditional telecommunications or broadcast model, under which virtually every country in the world created its telecommunications infrastructures either as government-owned or government-regulated industries.

The second model is a market-driven model where buyers and sellers are allowed to come together freely and do their business free of any government regulation or government interference. We believe the Internet should develop under that second model, as a market-driven arena, not a regulated one.

This is particularly important because telecommunications, broadcast television and the Internet are all going to converge in the next few years. You'll be accessing the Internet on your television set. You'll be getting broadcast television on the personal computer. You'll be making telephone calls from both. As all these services converge, they should do so in a market-driven environment, not a regulated environment. This means we will need to go through a very thorough deregulation of the telecommunications and broadcast industries.

The reasons why we initially regulated those industries no longer hold with the Internet. We regulated broadcast because we had limited spectrum to allocate. With this new Internet environment, we have almost unlimited bandwidth. There is no need for regulation. Competition will sort it out.

With respect to telecommunications, when the investments were originally made to build our telecommunications infrastructure, the size of the investment necessary relative to the size of telecommunication companies at the time was so large that we created regulated monopolies to help the infrastructure grow.

In the case of the Internet, we're going to have the greatest competition that free enterprise economies have ever seen among telecommunication companies, television cable companies, broadcast companies, consumer electronic companies, software companies, publishers, wireless companies and so on to build up the infrastructure of the Internet.

We don't need to regulate it.

In fact we should stand back and let that competition occur because it will be the most efficient way of getting what people want out of the system and the fastest way of getting the Internet into homes.

MINIMAL GOVERNMENT INTERVENTION

The third principle is that when governments do need to act, they should act in a minimal, predictable and transparent way, creating a simple legal environment and legislating only where necessary and in very precise ways.

The fourth principle is that whatever we do needs to take cognizance of the particular nature of this medium. For example, the Internet is decentralized by nature and, therefore, any governmental attempts to control it centrally will fail. They'll be impossible to implement. And life is too short to spend too much time doing what is impossible.

The nature of the medium is decentralized and thus, our policy mechanism must be decentralized. Similarly, the Internet is a medium where technology moves very rapidly, meaning any policy which ties itself to a particular technology will be outmoded before it is enacted. Therefore, we need to be sure that our policies are technology-neutral.

GLOBAL FRAMEWORK

The final principle is that this is the first marketplace that is being born global. The traditional means whereby industries grow within countries and then countries negotiate to make them compatible doesn't work with the Internet. From the very beginning, we need to have an international outlook. We need to have international agreements that set a common global framework for electronic commerce to develop.

Now these five principles - private sector leadership, a market-driven medium, minimalist government intervention, a situation where we respect the nature of the medium when we make policies - its decentralized nature - and the global nature of the medium - need to guide everything we do.

Now I'll run through quickly what we think are the important issues and our general disposition to them. I'll also give you details on one or two of them.

FREE FROM CUSTOMS & TAX

First, we believe that the Internet should be free of any customs duties. We've spent fifty years bringing down customs duties in the physical world. There's no reason to introduce them to this new world and, in addition, collecting online duties would be a bureaucratic nightmare. Because of this we are advocating at the World Trade Organization to make electronic transmissions free of any customs duties.

With regards to electronic commerce, we believe that any taxation should be neutral, and that there should be no discriminatory taxation against the Internet. No bit taxes, no Internet access taxes, no Internet telephony taxes. The application of existing revenue-based access should be done in a way that is simple, uniform and transparent.

LET THE MARKET SET STANDARDS

The second issue is electronic payment systems. We think electronic payment systems should be allowed to develop from the marketplace and that governments should not attempt to pre-regulate what goes on. Nobody knows what the marketplace is going to want or who's going to develop it and if we try to prematurely regulate, we'll only stifle that innovation.

Naturally, banking authorities need to monitor what's going on to ensure massive frauds are carried out, but that's very different than regulation. We don't think electronic banking should be regulated. Similarly on the third issue of technical standards, we think the marketplace, not governments, should set technical standards.

There were a number of governments in the world that were calling for an intergovernmental meeting to decide upon standards for the Internet, using the false argument that that would somehow accelerate the development of common standards and interoperability. That's the wrong course of action. First, governments would likely get it wrong in terms of what the right standards should be. Second, even if we got the standards right, by the time we reached an inter-governmental agreement, it would be too late because technology would make them obsolete.

So the best thing to do is let the market set standards, even if that means

sometimes having competing standards. The market will sort it out and work more efficiently in the long term.

NO NON-TARIFF TRADE BARRIERS

The fourth issue has to do with non-tariff trade barriers. These are cases where Internet service-providers are allowed to go into a country but only if they sign up with the Prime Minister's uncle's telecom company or something of that sort. We need to bring down all those barriers and truly create the Internet as a seamless global marketplace. The Internet itself technologically is a seamless marketplace and it should work that way without governments erecting all kinds of non-tariff trade barriers.

PRIVACY

The fifth issue concerns privacy. Privacy protection is crucial on the Internet if people are going to feel comfortable doing business there. And we also believe it should be a fundamental right of people to be able to protect their own privacy in this new electronic age. We do not wish for privacy to be violated as the electronic age emerges.

But having said that we care a lot about privacy protection does not mean that we think governments should come in and pass a thousand pages of regulations on privacy. We simply don't think it would work. We could pass the regulations and laws, but we could not enforce them. There are tens of thousands of Web sites forming everywhere around the world, and there's no way a government could police them, even with regulations. And in the process of trying to form and enforce those massive regulations, you would bog down the Internet in bureaucracy and slow down its development.

INDUSTRY CODES OF CONDUCT

So what's the alternative? The alternative we support is one we believe embodies the paradigm that I described earlier, where industry and consumer groups together develop codes of conduct based upon widely accepted OECD principles.

That is, a seller should notify a buyer of what's going to be done with any information that's collected. The buyer should then have the choice to opt out

and say: "no, I don't want to do business with you if that's what you're going to do" or, "yes, it's okay with me if you use the information but only in this way and not in that way."

Essentially the buyer and seller are forming a contract about what can be done with the buyer's information and the buyer has control. The buyer is able to then update information or check it for accuracy. The codes of conduct would essentially specify just that and would then state, for example, that the seller must notify the buyer with readily identifiable seals on a Web page.

Web sites that agree to join this organization that forms the codes of conduct would then be allowed to display some kind of seal or symbol on their Web site to show their customers that they were abiding by the privacy principles. The code of conduct organization could then set up an enforcement mechanism to handle consumer complaints and survey the Internet to ensure that those sites displaying the seal are abiding by the principles.

Now this allows the government and industry and consumer groups to tell consumers: "The Internet is a free medium; you can do what you like on the Internet. We don't want to limit where you can go. But be careful. If you visit a site that does not have one of these symbols on it, your privacy may not be protected." This maintains the freedom of the Internet but it also empowers consumers to protect themselves if they want to. It's their choice, but it gives them the tools and empowerment to do it.

This creates an incentive for Web sites to join a privacy code organization and get a seal. If they don't, they will be limiting their marketplace because there will be many consumers who will not go to a site that does not have a seal.

So you've created the market mechanism to try to encourage privacy protection. You've created a decentralized private sector based enforcement mechanism. You've empowered consumers to protect themselves and protect their data, and you've done it in a way that doesn't set up cumbersome government regulations that will bog down the Internet.

NO GOVERNMENT CENSORSHIP

Now we think that this kind of paradigm also holds for content. We believe that

government should not censor the Internet. Even if you do believe that government should censor the Internet, you're on the wrong side of the argument because government could not censor the Internet even if it wanted to. The Internet is a medium that is designed to defy such central government control.

We think a more effective method to protect children on the Internet is to empower parents to screen out content they don't want in their homes through the use of filtering devices and rating systems.

If you're the type of parent who's afraid of the Internet, who doesn't understand it, whose children understand it better than you, and you sign up with your Internet service-provider, you should have some boxes you can check that will filter various types of Internet content.

This could be done using software packages created by organizations whose value systems you feel comfortable with. For example, there may be a Christian Coalition package or a Children's Television Network package. Different children's advocacy groups may have packages. And those software packages will then be triggered and filter out content based on the given group's guidelines. Now they're not a hundred percent foolproof, but they can do a pretty good job and they're getting better.

If you're the kind of parent who mistakenly believes you understand the Internet better than your children, you can let everything through, and then in the browser or the search engine, you should have the ability to filter out content that you don't want. Which types of content are filtered and which are not should be your choice as a parent. The tools should exist to empower you to do that. Again, we think this will work more effectively than government censorship to meet the social goal.

INTELLECTUAL PROPERTY

The next issue has to do with intellectual property protection. A lot of what is going to be sold on the Internet is intellectual property and, therefore, we believe that copyrights, patents, and trademarks need to be protected on the Internet. International copyright protection treaties were recently negotiated in Geneva and we're urging their ratification by all nations because we believe that they will effectively protect copyright holders without unduly burdening the Internet.

Similarly, we think there needs to be agreements on patent protections of Internet-related patents. With regards to the reform of the domain name system, there needs to be respect for trademarks in domain names. We also think that the technical management of the Internet, which for historical reasons have partly resided in the US Government, should be privatized and managed by a private non-profit international corporation with an international board of directors.

We are taking steps now to try to move towards that privatization. The US Government is prepared to give up all the authority it now has over the management of the Internet, including management of the root service system, to this new private international non-profit body. We are seeking to do this in the next six-month period or as soon as possible after then.

LEGISLATIVE RECOGNITION OF ELECTRONIC BUSINESS

The eighth issue has to do with the *Uniform Commercial Code*. We believe it's important to form international agreements which recognize the conduct of business electronically, recognize electronic contracts and also recognize means for authentication and digital signatures. We believe this too should be market-driven, not government-driven, and that authentication and digital signature techniques should be able to be formed by private industry and recognized by governments for legal purposes.

We don't believe the government should get into the business of licensing authentication or digital signatures, or in any way setting rules that are too intrusive. We think these standards should be set by the marketplace. The buyer and the seller should choose the level of authentication they feel they need for a given transaction. Those levels of authentication may be offered by software companies, banks, accounting firms or notary firms, and the buyer and seller should be able to choose what they want, and then it should be recognized legally in contract.

And we're supporting processes around the world now to create a usable *Uniform Commercial Code* so that this can be a contract-based system.

ENCRYPTION

The final issue - the one that has most perplexed us and been the most difficult

- concerns security and, in particular, the issue of encryption. High level encryption is necessary for transactions to be secure. In the United States, we have now liberalized our earlier stance on encryption, allowing any electronic commerce transaction and financial transaction to use any type of encryption, including 128-bit, one of the most sophisticated types of encryption. We also allow 128-bit encryption for authentication in digital signatures.

However, there is an ongoing controversy on the question of using high-level encryption in other types of purer communications, such as e-mail. We're still trying to work out the proper compromise between the needs of law enforcement and the needs of commerce.

RESOLVING ISSUES

Let me conclude my remarks by saying we are pursuing all these issues that I've run through on the international scene, having discussions and trying to reach agreements. As we approach these discussions, we in the United States don't believe by any means that we have all the answers. These issues are very complicated. The Internet is changing very rapidly. We need to resolve these issues but we need to resolve them in a flexible way. And we know we're going to have .2, .3, and .4 versions of our strategy as the marketplace and technology teach us about how things are evolving.

NEW PARADIGMS

We have a very exciting opportunity here. When I first received this assignment, I read some histories of the Industrial Revolution. It was very interesting because a number of countries at the time understood that there had to be new commercial, legal and economic paradigms in the Industrial Age compared to what there had been before. Some developed and embraced those new paradigms. Other countries tried to hold onto their old ways of doing things. And with a hundred percent correlation, those that embraced the new paradigms succeeded in the Industrial Age. Those that didn't fell backward. New countries who had not previously been so successful emerged as industrial leaders, and some countries who had been world leaders fell behind.

We believe we are in a similar period right now. Use of the Internet as a commercial

medium is just a couple of years old. In the United States, we are not looking to dictate how this medium should develop, because we don't think we know enough to do that and we don't think it would be proper to do that even if we did know enough. Instead, we are looking to come together with those countries who are interested in grasping this future and, as equal partners, trying to architect the basic structures for this new era.

NOT FOR TRADE NEGOTIATION

And for those countries who don't want to, we're not interested in conducting this as a trade negotiation. If there is a country that wants to make its own standards, keeps its markets closed, keep up non-tariff barriers, require that everything be translated into its language, we're not going to try and convince them to do otherwise.

It will be unfortunate for its people, but we're not going to try to make this a trade negotiation. There are going to be a billion people on the Internet by the year 2005. If the people of a given country are not there, it will be their problem, not the world's problem.

I travelled to Australia because I know that there is a keen interest in this country to embrace this future. We know that the Internet is taking off in this country. I am here in Australia because we are interested in learning about how you view these issues, and we would like to work with you in helping create this new future.

If we can do this right, if we can set the right framework to allow this new digital age to really take off, it is going to be something that we can be proud of, something that our children will benefit from and our grandchildren will benefit from. And it is something in which I personally view as an exciting opportunity to participate.

Ira Magaziner is Special Advisor for policy development on On-line and e-commerce issues to President Clinton. This article is based on his paper presented to the e-commerce "Enabling Australia" Summit in Canberra on 16-17 April 1998.