THE PORTRAYAL OF ICT IN THE MEDIA: A MALAYSIAN SCENARIO

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Abstract
Malaysia, as a developing country, is gearing towards creating a network society. This is aimed at providing opportunities for the *rakyat* to actively participate in the economic, social and political spheres of the country via information and communication technology (ICT). As such the national mass media, government or private, have jumped on the bandwagon and increasingly placed ICT in their content. This paper discusses how media portray information on ICT and how the information is perceived by the *rakyat*. It is a descriptive discussion of a content analysis on selected print and electronic mass media in their depictions of ICT, and some selected findings from a survey on 1500 respondents throughout Malaysia. The purpose is to highlight the role of the media in the dissemination of information on ICT and how they help the government in popularizing and promoting the use of ICT towards the realization of the network society.

Abstrak
Malaysia adalah sebuah Negara membangun yang sedang bergerak ke arah membentuk masyarakat jaringan. Matlamat ini bertujuan memberikan peluang kepada rakyat untuk turut serta dengan aktif dalam aspek ekonomi dan politik melalui teknologi komunikasi dan maklumat (TKM). Justeru, media massa, sama ada milik kerajaan atau swasta telah turut serta dan giat memuatkan TKM di dalam isikandungannya. Makalah ini membincangkan bagaimana media memaparkan maklumat tentang TKM dan bagaimana maklumat itu dipersepsikan oleh rakyat. Perbincangan secara deskriptif adalah berdasarkan kajian isi kandungan ke atas pemaparan TKM oleh media cetak dan elektronik terpilih dan beberapa penemuan tinjauan ke atas 1500 responden di seluruh Malaysia. Perbincangan dalam makalah ini bertujuan menghuraikan peranan media dalam menyebar luas maklumat tentang TKM dan bagaimana boleh membantu kerajaan membudayakan penggunaan TKM ke arah merealisasikan matlamat masyarakat jaringan.

Keywords: Information and communication technology; mass media; network society; dissemination of information; mass media contents.

Introduction

Broadly, a network society embodies the material foundation of what is known as the information technology paradigm. As Castells (2000) points out, this paradigm has several interesting characteristics which centers around information technology. Firstly, it is informational since information is its raw materials. The technologies are used to act on information, and not just information to act on technologies. Secondly, these technologies directly shaped all processes of our individual and collective experience since information is pervasive in all human activity. Thirdly, any system or set of relationships using these new information technologies functions on the networking logic, i.e. interaction is complex and creative, thus the patterns of development arising from the interaction is unpredictable. Understandably, the fourth feature is flexibility whereby a society is constantly changing and organizationally fluid. This may be liberating but at the same time, Castells warn us that this can be repressive since the powers that be will be those that keep rewriting the rules. A fifth feature of the paradigm is the increasing convergence of specific technologies into a highly integrated system, so much so that the technologies are now inseparable from evolving human nature.

Based on this paradigm, it is clear that ICT is the driving force of the network society. The term network society seems like a natural progression from one that was previously labeled as the information society or the post-industrial society (see Bell, 1979, Drucker, 1989). A network society denotes a society capable of utilizing ICT in all aspects of daily life – from education to civic participation, and from work to entertainment and leisure (Selwyn, 2003) at all levels of experience. Given the theoretical attractiveness of the idea, governments all over the world rush to incorporate a network society in their rhetorical vision. However, the practical utility and realistic implementation of the notion is another story. Still, it is a worthwhile political decision and a noble effort to try and include their citizens in the global process via ICT.

As aforementioned, it now seems fashionable and at times mandatory for governments around the world to embark on ICT policies and implementation for national development. Most governments assume that ICT is a new tool and a strategic weapon for development. In 1989, the Organization for Economic Cooperation and Development (OECD, 1989) listed at least three factors that demonstrate the importance of ICT in national development:

i. ICT is the main platform to transform societies and nations toward the information society. The formation of an information society is viewed as an outcome of the paradigm shift in the industrial structure and social relationships from one that is based on natural resources and physical materials to one that is based on information and knowledge;
ii. ICT development opens up commercial opportunities in the manufacturing and service industries. The digitization of resources establishes a standard delivery system for all forms of information, thereby integrating various services and providing opportunities for growth of new service industries;
iii. ICT overflows across borders, thereby enabling management sectors and service activities to operate at the global level.

The Malaysian ICT scenario

Malaysia also wants to be a player in ICT development. Malaysian leaders realize that ICT plays a significant role in national development, particularly in improving efficiency, productivity and competitiveness. The critical role of information in investment decision-making and global competition has thrust ICT into the forefront of the national development process in Malaysia (Abdul Azizal & Fuziah Kartini, 1997). Under the Seventh Malaysia Plan (1996-2000), ICT infrastructure was developed so as to create a strong foundation for building a knowledge-based industrial economy and an information-rich society. Under this Plan, investment in ICT rose steadily at a rate of 9.2% a year from RM3.8 billion to RM5.9 billion (Malaysian Communications and Multimedia Commission, 2002).

The Malaysian government encourages ICT education, application, participation and Internet usage by Malaysians. Malaysia became linked to the Internet in 1985 when the Joint Advanced Research Integrated Networking Project (JARING) was established under MIMOS. As the first Internet Service Provider (ISP), JARING links Malaysia to Internet, and enables Malaysians to travel on the information superhighway. In the initial years, Internet usage grew very slowly but the pick-up was quite remarkable; in October 1994, there were only 947 JARING subscribers, but by August 1996, the figure had zoomed to 23000 (MIMOS, 1996). A s of February 2004, and with three ISPs, Malaysia is placed 19th among the top 25 countries with the highest number of Internet users while registering a 31.8% Internet penetration (InternetWorldStats.com as quoted in In.Tech, 8 April 2004).

The Malaysian vision of the network society is specifically embodied in the National IT Agenda (NITA) which was launched in 1996 and this is further reinforced when the Third Outline Perspective Plan 2001-2010 was revealed. ICT initiatives in Malaysia can be traced much earlier to the Industrial Master Plan (IMP) of 1985. In IMP, the electronic and information technology industry was identified as highly-potential and must be developed, the focus being the software industry. In 1990, when the Ministry of Science, Technology and Environment (MOSTE, 1990) published the Industrial Technology Development – A National Plan of Action, the significant role of microelectronics and ICT in national development became more prominent than ever.

The political will of the Malaysian government to develop an information society culminated when the then Prime Minister, Dr. Mahathir Mohamed, declared Vision 2020: "… by the year 2020, Malaysia can be a united nation, with a confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous, and in full possession of an economy that is competitive, dynamic, robust and resilient. In the information age that we are living in, the Malaysian society must be information-rich. It can be no accident that there is today no wealthy, developed country that is information-poor and no information-rich country that is poor and undeveloped" (Mahathir Mohamed, 1991). From then onwards, Malaysia formulates policies and

embarks on various programs and projects to foster the growth of ICT and its applications in the country. The main policy here is the National IT Agenda (NITA) while the main project is the Multimedia Super Corridor (MSC) and legitimization took place with the Communications and Multimedia Act 1998.

NITA was formulated in 1996 as a comprehensive framework towards national development in the information era. The aims of NITA are to transform the nation to an information society based on values expressed in Vision 2020; to focus on a comprehensive human development; to promote cooperation and partnership among the three sectors of government, private and community; and to apply both top-down and bottom-up approaches in the planning and implementation of ICT programs. With the theme "turning ripples into tidal waves, " NITA identified three strategic components in its framework that need to be developed, namely people (consisting of individuals and groups), info structure, and applications. Strategies for each component were distinguished. For the first component, education, skills development and acculturation were delineated while network, affordable appliances, laws and regulations were included for infostructure, and finally applications comprised indigenous content development, interactivity, infotainment, edutainment and infocommunication.

The Multimedia Super Corridor(MSC) was first announced by Prime Minister Mahathir in a speech in August 1995. Spatially, the MSC is a 15-by-50km zone that encompasses Kuala Lumpur City Center (KLCC), the new administrative center in Putrajaya, the intelligent city of Cyberjaya, and the Kuala Lumpur International Airport (KLIA). The MSC is supported by the provision of a world-class digital fiber backbone as infrastructure. The private sector, especially world-class multimedia companies such as Ericsson and NTT, have located in the MSC and are undertaking active R&D, remote manufacturing as well as introducing high value-added ICT goods and services, thereby enabling Malaysia to become a regional ICT hub. This is probably the most ambitious project the country has undertaken in the 47 years of independence to which she is highly committed. Under the MSC, seven flagship applications were launched, i.e. e-government, borderless marketing, R&D clusters, tele-health, world manufacturing network, smart and multipurpose cards, and smart schools (http://www.msc.com.my).

In 1999, the introduction of the Malaysian Communications and Multimedia Act (1998) repealed the Telecommunications Act (1950) and the Broadcasting Act (1988). This new regulatory framework and structure breaks new ground by being the first of its kind in the world. Based on the concept of a "technology-neutral" regime, the Act embodies the principles of transparency, adherence to timelines, accountability and self-regulation (Malaysian Communications and Multimedia Commission, 2002). Under this Act, a Commission was set up to facilitate the ten National Policy Objectives which are:

i. to establish Malaysia as a major global center and hub for communications and multimedia information and content services;
ii. to promote a civil society where information-based services will provide a basis of continuing enhancements to quality of work and life;

iii. to grow and nurture local information resources and cultural presentation that facilitate national identity and global diversity;
iv. to regulate for the long-term benefit of the end-user;
v. to promote a high level of consumer confidence in service delivery from the industry;
vi. to ensure an equitable provision of affordable services over ubiquitous national infrastructure;
vii. to create a robust applications environment for end-users;
viii. to facilitate the efficient allocation of resources such as skilled labor, capital, knowledge and national assets;
ix. to promote the development of capabilities and skills within Malaysia's convergence industries; and
x. to ensure security and network reliability and integrity.

As the country moves on under the Eighth Malaysia Plan 2001-2005, ICT became a sharper focus. Eight core strategies were identified, namely establishing Malaysia as a ICT and multimedia hub; upgrading and increasing communication infrastructures; developing human resources in ICT; promoting e-commerce; fostering local capacity and creating content development; broadening the implementation of MSC's flagship applications; encouraging the formation of a critical mass for ICT-based small and medium scale industries; and increasing R&D. In accordance with this the Third Outline Perspective Plan (OPP) 2001-2010 was drawn and this pushed Malaysia directly into developing a knowledge-based economy or K-economy.

A K-economy is one where the generation and utilization of knowledge contribute to a significant part in economic growth and wealth creation. Although the traditional factors of production, i.e. labor, capital, raw materials and entrepreneurship remain important, knowledge is the key factor driving growth, creating new value and providing the basis to remain competitive. The fundamental enabling tool in a K-economy is ICT with human capital as the nucleus. To assess Malaysia's readiness to become a K-economy, the Knowledge-based Economy Development Index (KDI) was developed. It is derived from selected key factors required to drive a K-economy, such as computer infrastructure, info structure, education and training as well as R&D and technology. It compares Malaysia's relative position to 21 other countries which are mainly developed. Malaysia is ranked 17th on the KDI in the year 2000 (OPP, 2001).

The major thrusts of a K-economy for Malaysia is outlined as follows: building the knowledge manpower; intensifying S&T and R&D; accelerating info structure development; restructuring the financial system; raising the knowledge content in agriculture, manufacturing and services sectors; preparing the private sector for the change; reinventing the public sector; fostering the ethical utilization of knowledge; and bridging the digital divide. All these professed the commitment of the Malaysian government to include the *rakyat* from all walks of life in the ICT era. However, the initiative should not stop here because for the *rakyat* to be included, they need to be made aware, informed, persuaded, educated and facilitated to participate in the intended network society.

For this purpose, Malaysia embarked on communication campaigns from time to time. The series of campaigns began in late 1990s with various slogans and vehicles from the commercial-inspired jingle titled *I Love IT* to the more down-to earth approach of *One Home One Computer* drive. The mainstream mass media, especially those closely associated as 'partners' of the government, were the main conveyors of these campaign messages. Alongside this, the info structure and policies were formulated to support the movement towards the network society.

Clearly then, the Malaysian ICT vision needs to be diffused among her citizens so as to create the necessary awareness, distribute locally and functionally relevant information for action, facilitate learning and increase participation. This is where the local mass media industry enters as active partners of the government toward the development of the network society in Malaysia. This paper is a journey into this dimension. It reports on the findings of a study basically done to identify how ICT are depicted in the mass media in Malaysia and how they are perceived by the *rakyat*.

The study

The first part of the study, i.e. the content analysis, focuses on the mainstream mass media. The mainstream mass media include popular or highly-rated and non-controversial print and electronic media in the country. Eight newspapers - two newspapers each representing four major spoken languages of Malaysians – Malay, English, Chinese and Tamil, namely Utusan Malaysia, Berita Harian, The New Straits Times, The Star, Nanyang Siang Pau, Sin Chew Jit Poh, Tamil Nesan and Tamil Nanban were content analyzed. For the electronic media, programs on eight radio stations - RTM1, Radio 4, Radio 5, Radio 6, Era, HitzFM, MyFM, and THR.FM - and two television stations - TV1 and TV3 - were also content analyzed.

The content of these print and electronic media was sampled on one constructed week in the month of March 2003. The days chosen represent each day of the week - Sunday through Saturday – in March 2003. Two coding schemes were formulated to suit to the peculiarities of each media category – Scheme 1 for the print media and Scheme 2 for the electronic media. Following this, two coding sheets were accordingly constructed. The coding schemes and sheets were constructed in *Bahasa Malaysia*. Six individuals were trained as coders and the inter reliability coefficient was recorded at a high value of 89.5%. In this paper, the findings will be reported according to the media categories and some selected items such as theme, direction, and prioritization of the ICT stories in the media analyzed. In the study, ICT was defined as "new technologies … that include the satellite broadcasting networks, television, video, digital radio, Internet (including its wide range of applications such as e-mail, e-commerce, e-conferencing etc.) , Extranets, wireless communication devices such as the mobile phone, digital video disks (DVDs), CD-Rom, and video/voicemail" (http://www.undp.org/info21/index5.htm).

The print media. We shall begin with the print media. From the eight newspapers analyzed, we found a total of 299 ICT-related news or information. Berita Harian (BH) recorded the highest number (77) followed by The New Straits Times (NST) (69), Utusan

Malaysia (UM) (67) and The Star (ST) (46). Nanyang Siang Pau (NYSP) had 19, Sin Chew Jit Poh (SCJP) had 17, while the two Tamil newspapers, Tamil Nesan (TNS) and Tamil Nanban (TNB) had only 2 ICT- related stories each in the studied period.

Most of the stories came in the form of hard news, i.e. factual and highly newsworthy and focused on economic, government and international issues. The stories were themed around ICT and business, commerce and economy (75), ICT and development, management and services (56) , ICT and education (45), and ICT and science and technology (35). ICT Soft news, i.e. news that focused on human interest, entertainment, lifestyle, non-controversial and non-policy stories were featured minimally in the newspapers.

In terms of direction of stories, the newspapers depicted more positive ICT messages (201), i.e., ones that demonstrate the usefulness and advantages of ICT in our lives, rather than neutral (55) and negative ones (43). ICT stories also seemed to be prioritized, as they were mostly published in important pages such as front pages and specially-dedicated sections like InTech (ST) and Computimes (NST). In addition, there were mostly special features (163) compared to news (99) and others (17), letters to the editor (17), and editorials (3).

For the newspapers, it can be concluded that ICT-stories were given adequate coverage and priority. In fact, they became regular features, dedicated sections and important news. However, the content was too news and event-related and not enough instructional forms of writing. As such the newspapers were merely informative and not very educational and persuasive as a facilitator of the network society for Malaysians in general.

The electronic media. Let us now turn to the electronic media, firstly radio and secondly, television. For the media in this category, the frequencies of ICT programs were analyzed from the daily program schedules, some collected directly from the stations and some as published in the newspapers. Eight radio stations, 4 private and 4 public, were studied.

All the radio stations aired, in one way or another, ICT-related programs. RTM1 had a dedicated ICT program by the title of *Arif IT*. *Arif IT* was aired about twice a day everyday and once on Sunday. This means *Arif IT* was featured 13 times a week, and thus 52 times a month. The other RTM stations, Radio 4 (English), Radio 5 (Chinese) and Radio 6 (Tamil) did not feature any special ICT program, rather had only news and information on ICT broadcasted during news, such as *Berita Terkini* and Top News of the Hour.

As for the private radio stations, THR.FM broadcasted more special programs on ICT, about 14 times a week, thus 56 times in the month of March 2003. These programs were broadcasted in Tamil and were 30 seconds long per program. Hitz. FM and My.FM had only one each, but these programs were longer than the ones on THR.FM. Hitz.Fm had an hour-long program titled Cyber Connection every Monday night, and My.Fm had four hours of ICT programs, namely *Chia Xian* dotcom, *Melintasi Laman Web, Berhubung*

Menerusi Bilik Chat and *e-Cinta* every Sunday night from 8:00 pm till midnight. Era.FM had no special ICT programs, but only broadcasted ICT stories as brief news in *Info Ringkas*.

Moving on to the television stations, the program schedule indicated 83 ICT-related programs, with 558 depictions during the studied period. TV3 had more programs (55) with 508 ICT depictions, while TV1 had 28 programs with 50 depictions. From this total, news tended to be the main program that carried ICT news and information for both stations (228), followed by depictions in drama or serial programs (77), magazine programs (50), films or movies (42), talk shows (39) and entertainment/variety (20). Other depictions were found in documentaries (17), commercials and promotions (10), religious programs (8), cooking programs (8), sitcoms (6), children's programs (20), and game show (1).

Television depictions of ICT are themed mostly around ICT and development, management and services (82), ICT and science and technology (42), ICT and entertainment (31), ICT and social/religious/moral issues (31), ICT and education (21), and ICT and business, commerce, and economy (21). Only a few depictions are on ICT and law, security and crime (11), ICT and health or medicine (5), ICT and sports (2), and ICT and administration or politics (2).

Although TV1 had less ICT depictions compared to TV3, the station carried dedicated ICT programs entitled *Era IT* and *Kenali IT* broadcasted 3 times during the period of study. It is quite baffling to note that Era IT was broadcasted in the late block air time, i.e., 2:45 and 5:05 in the morning. In terms of direction, television images of ICT were basically positive (451) rather than neutral (93) and negative (14).

It can be safely said that the electronic media in Malaysia, both radio and television, offered frequent and adequate programming on ICT. Like the newspapers, radio and television also featured ICT more as news rather than in any other types of programming. However, unlike the newspapers, radio and television did not have enough dedicated airtime on ICT. As such, the electronic media cannot be said to effectively facilitate the education of the *rakyat* toward the network society. The electronic media merely informed but were not instructional and persuasive enough for this.

The second part of the study is a survey. This survey was conducted in May 2003 in 6 defined zones comprising all 14 states of Malaysia. These are the Northern Zone consisting the states of Perlis, Kedah, Penang and Perak; the Central Zone consisting the states of Selangor and Negeri Sembilan, and the Federal Territory of Kuala Lumpur; the Southern Zone consisting the states of Malacca and Johore; the East Coast Zone consisting the states of Kelantan, Trengganu and Pahang; the Sarawak Zone; and the Sabah Zone.

A total of 1500 respondents were purposively sampled in urban locales in the defined zones. They were interviewed using a structured questionnaire by trained enumerators in various premises such as the post office, banks, government departments, local council

office, and telecommunication centers. These premises are customer-oriented centers frequented by the people for mundane yet important transactions.

The survey found that the source of ICT information is various. However, the mass media was stated as the most important source compared to interpersonal sources such as friends and family. Among the mass media, TV is mentioned as the source most used for general ICT information acquisition, followed by newspapers, radio and magazines. Surprisingly, the Internet is named as the sixth source after friends. In terms of genres, ICT information in TV programs, TV news, newspaper news, and newspaper articles are ranked as most useful in helping the respondents to understand ICT. Brochures are said to be the least useful in this case.

The respondents were asked on their perceptions of the characteristics of information pertaining to online transactions and services in the government and private sectors. Some 60 percent believed that information about e-government is easily available from the mass media and some 50 percent said that it is readily available from the relevant government offices. This information was perceived to be very useful by about 71 percent of the respondents; easy to understand by about 58 percent, and believable by some 52 percent. This finding reflect that the information dissemination effort thus far has not yet fully achieved its target of trying to mobilize the population to understand and participate in the network society envisioned by the government. This means there is still much work to be done in order to create the critical mass.

As for information about e-commerce, about 64 percent of the respondents perceived that this is easily available from the mass media. However, only 49 percent said that the information on e-commerce is readily available from the banks themselves. Almost 67 percent said that the information are very useful, some 52 percent thought it is easy to understand, but only 46 percent said it is believable. This again reflects that there is still more to be done in terms of creating a good enough participation of the people in e-commerce.

Discussion

From the survey, it is found that the rakyat are aware of ICT content in the mass media and this is perceived as quite useful, believable and easy to understand. This is because they noted that the information is quite easily available from the mass media. In other words the Malaysian mass media have played the role as the diffuser of ICT information. The awareness stage has been set. The next question is has the media also been able to motivate the *rakyat* to be active participants in the ICT applications.

Generally, the findings of the content analysis indicated that the mainstream Malaysian media published and aired regular items and programs on ICT, in both explicit and implicit depictions. These depictions were mostly themed around ICT and business, commerce and economy and were featured more as news rather than any other forms of writing or programming. These were mostly positive depictions that demonstrated the role and utility of ICT in the development of individuals, society and the nation. It can be deduced that ICT depictions in the media are facilitative in so far as informing

Malaysians on what it is all about, but to say that they facilitate Malaysians to participate actively towards the establishment of a network society is foolhardy just yet. This is reflected in the findings of the survey on the ownership and usage of smart cards in the daily dealings of the rakyat. For example, only half of our respondents have and used MyKad (the Malaysian multipurpose e-card containing individual's ID, driver's license, passport information, and health, electronic cash and transportation applications).

The diffusion of innovations literature often theorizes and demonstrates that the mass media are relatively more important at the awareness and knowledge stage of the innovation-decision process rather than at the persuasion stage. This is because the mass media can reach a large audience rapidly, create knowledge and spread information, and lead to changes in weakly held attitudes (see Rogers, 1995). However, interpersonal channels, such as change agents and opinion leaders, are said to be more influential in leading people to decide and adopt an innovation. Perhaps then, it is quite unfair to expect the Malaysian mass media to be facilitators in the process of our building of the network society.

Moreover, the mass media suffer from an identity crisis when it comes to playing the educational and persuasive roles. Since they were invented, the mass media had always been viewed as more of an entertainment medium rather than an educational medium. As such, we often fail to look for the lessons that can be learnt from the content of the mass media, especially television, and tend to dismiss them as merely entertainment. We seldom recognize the media as tools in the learning process, whether direct or indirect.

In addition, media literacy among the masses is very low since the media literacy movement has not reached its potential in Malaysia. Without enough training and knowledge in media literacy, Malaysians seldom become discerning consumers of the mass media. In other words, media audience in Malaysia may not be able to learn much from the mass media when it comes to ICT and the network society. This is where media literacy must come in and be offered as a compulsory subject in primary and secondary schools in Malaysia.

Still the mass media is the most convenient tool for the mass dissemination of knowledge and information. The mass media can pave the way effectively as a channel of mass communication toward the network society in Malaysia, if properly planned and strategized, This can be done if media producers are more sensitive to the features of the network society and embrace the information technology paradigm in their planning and implementation of media content. ICT initiatives by the government are aplenty but they have not been given enough space and airtime by the mass media. At times when they were featured, they were mostly news items and not enough dedicated or specialized features.

Conclusion

Malaysia, in order to become a strong ICT nation, has indeed moved decisively in terms of info structure building, policy formulation and ICT awareness campaigns. Yet, Malaysia also realized that ICT applications among the rakyat are still not widespread.

The digital divide between urban and rural and the haves and the have-nots is still prevalent.

The mass media are important tools to impart information on ICT. Malaysian mass media have played the role in diffusing these messages for the purpose of informing the *rakyat.* The information disseminated through the mass media must be able to garner the support of the *rakyat* to apply ICT in their daily lives. This information must be perceived as useful, easy to understand, believable and easily available to them. However, the study has indicated that these characteristics of information on ICT are perceived only by a moderate number of people.

It is suggested that the mass media, especially radio and television, plan, produce and offer dedicated programs on ICT, particularly that which is directly related to the Malaysian ICT vision. Perhaps the government may want to have a special television channel ala Tech.TV for this purpose. As a partner of the state in national development, the mass media in Malaysia must strive to do more for the network society.

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