



## Is ICT gendered? An understanding from the Orang Asli

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### Abstract

Why are we so resolute that men and women are different? This is because society divides people into feminine women and masculine men. Similarly, technology and new ideas impact differently on both men and women. In fact, studies on gender explore ways of seeing women and men as not just biological organisms, but as people formed by their everyday social world. Therefore, this paper examines the challenge of understanding gender issues, relations and patterns in the development of a Telecentre among the Orang Asli. This study of gender issues with regard to access to and utilization of ICTs was explored through community engagement. As against the back drop that the Orang Asli did not easily or readily accept new ideas or changes within their environment and lifestyles, this study discovered that the Orang Asli, as a whole, welcomed new ideas and technologies that would move them forward. But more importantly, they were not very particular, gender-wise, about who actually spearheaded the drive to improve their wellbeing and change their fortune.

**Keywords:** engagement, gendered, gender issues, ICT, Orang Asli, telecentre

### Introduction

Without women's participation in decision-making in all spheres of life, poverty will not be eradicated, nor will fully democratic societies be created.... Women's ability to take advantage of ICT is dependent on conducive policies, an enabling environment in their countries to extend communications infrastructure to where women live, and increased educational levels (UNESCO, 2012).

There is no tall-telling how the information and communication technologies (ICTs) has transformed the global economy and created new networks that stretch over continents and cultures. However, there is a growing consensus on digital disparity in ICT access and use between and within countries. As a consequence, research interest in the digital divide from the gender dimension has continued to reverberate in most social science discourses. It is argued that the persistent gender inequalities and unequal power relations within societies have resulted in the gender digital gap (Arun & Arun, 2002; Ng & Mitter, 2005; Best & Maier, 2007).

Drawing on evidence in ICT application in both developed and developing countries, a digital divide is to be expected if the access and use of ICT are more readily available to men than women in Orang Asli communities when a telecentre project is initiated. Thus, factors which are likely to lead to gender digital gaps must be identified at the onset in ensuring the effective use of ICT. This study critically explores community engagement in Pos Balar, Pos Gob, Pos Sinderut and Pos Lenjang, but as a process to facilitate equality in gender digital rather than gender digital divide in the research areas. Our understanding of community engagement is based on inference that it is a process which benefits the community as well as organizations or institutions. We argue, it is a means of solidifying relationships

between the institution and the community for the purpose of adopting a collective vision for the benefits of a whole community.

## ICT and gender

There is a gender divide, with women and girls enjoying less access to information technology than men and boys. This can be true of rich and poor countries alike (Kofi Annan Former United Nations Secretary-General, at the World Summit on the Information Society, Geneva, 10 December 2003).

Francesca Bray in her 2007 article noted that one fundamental way in which gender is expressed in any society is through technology. Paraphrasing a number of notable authors that include MacKenzie (1991), Lægren (2003b), Mellstrom (2004) and Miller (2004) Bray argues,

Technical skills and domains of expertise are divided between and within the sexes, shaping masculinities and femininities: Maybe the iconic womanly skill is basket-making, whereas men should excel at hunting. The boys must learn to clean their fathers' tools to get a feel for grease before they are taught to use them. Poor women raise silkworms and sell the cocoons to rich households where the mistress organizes the tasks of reeling, spinning, and weaving among her servants. While in today's world boys huddle around the computer screen practicing hacking skills, while girls develop new communication codes using emoticons (1997 and 2007).

A common observation around us indicates the traditionally ascribed gender roles influencing the products that are made for each gender and the way it is marketed. It affects the consumer patterns too. In fact,

Men are viewed as having a natural affinity with technology, whereas women supposedly fear or dislike it. Men actively engage with machines, making, using, tinkering with, and loving them. Women may have to use machines, in the workplace or in the home, but they neither love nor seek to understand them. They are considered passive beneficiaries of the inventive flame (Bray, 2007).

These techno-gender differences are a common discourse on gender-feminist research and ICTs and our succeeding discussion will briefly examine a few of them.

During the beginning of this new century, states and society at large began to embrace new tools in communication, changing forever the way we communicate, coordinate our activities and organize social interactions (Hilbert, 2011; see also Bell, 1973; Perez, 1983; Webster, 1995; Negroponte, 1995; Castells, 1996; Freeman & Louça, 2001). Hilbert argues at the core of these new transformations, the issues of who has access to digital networks, and in particular, who gets empowered and who is Informationally marginalized by use of these new tools must be seriously considered. To drive home the issue of digital divide, Hafkin and Taggart (2001, cited in Morgan et al., 2003) pointed out after poverty and violence against women, access to ICT is the third most challenging subject facing women globally. Evidence suggests that gender inequities in many areas of development, such as education, health care, access to economic opportunities can be bridged with the help of ICTs. As such, Gadio (2001) suggests that failure to incorporate a gender focus in the ICT development process can widen further gender inequities. This remark is echoed by Wood (2001). Accordingly, Derbyshire (2003) maintains:

Computer Technology (like any technology) is shaped by the values, assumptions, goals and prejudices of those involved in its design, engineering and financing. Its use and influence in society is shaped by the roles, values, assumptions and goals of those who own it and those who can access it (p. 48).

The value of ICTs as an impetus to women empowerment and technological gender neutral has added to demand for ICT-gender oriented development projects. Huyer and Sikoska (2003) argued, given the capacity of ICTs to access, transfer and apply knowledge and information on almost every aspect of human engagement, it is increasingly being recognised for its potential to carry the new global knowledge-based economy and an effective tool for women's empowerment. Women no longer have the luxury to ignore the important role ICTs play in our daily life and survival. This is what Fatma Alloo of the Tanzania Media Women's Association stressed, "We must recognise that information is here to stay...What we have to decide is we either play the game and turn it to our advantage or lose out completely (Society for International Development and UNESCO, 1998:14 cited in Huyer & Sikoska 2003). Simple access to information and communication can end the isolation of women and promote improved health, access to reproductive services, economic growth as well as alleviates poverty (see Bonder, 2002; Gurumurthy, 2004; UN, 2005) .

While the potential of ICT for stimulating human development, economic growth, socioeconomic development and effective governance is well recognized, the benefits of ICT have been unevenly distributed within and between countries and gender. Huyer and Sikoska noted that female accounted for far less users than their male counterparts. While only 38% women in the United States use ICTs and ICT-related services, a much lower percentage was observed in countries such as Brazil (25%), Japan (17%), South Africa (17%), Russia (16%), China (7%) and Arab States (4%) (UNDP 1999:62 cited in Huyer and Sikoska, 2003).

Having said that, as ICT statistics are widely available and internet and mobile telephony penetration rates began to rise, women started to catch up the 'technology ladder' in many developed countries (Rice & Katz, 2003). While the gap has narrowed over time (Cummings and Krout (2002) reported that most new users in the US in 2000 were women.), gender differences in digital remained and mainly concentrated on marginalized groups (Leggon, 2006). For example, women remained less frequent and less intense users of the internet (Ono & Zavodny, 2003; Wasserman & Richmond-Abbott, 2005). It was found that girls used the Internet for instant messaging and chatrooms, whereas boys downloaded games and music, engaged in online trading, and created Web pages (Lenhart et al., 2001; Roberts & Foehr, 2004). By and large, the current utilisation of ICTs either in the developed or developing countries, still has elements of 'genderedness'. If ICTs were to promote women's empowerment, it is predicted that the promise is more realizable in the developed than the developing countries.

Indeed, there are disagreements against the notion of digital or technological marginalisation. This position is perhaps supported by the so-called notion that women are rather less tech savvy or technophobic and that men are much better users of digital tools (see also Bray, 2007). A counterargument on the other hand, points to the fact that women are at a natural disadvantage to benefit from the digital revolution because the technology is not built according to the specific needs and intuition of women (Huyer & Sikoska, (2003). Besides, it is apparent that ICTs are regulated by decision-makers, the majority of which are men. In the light of such gender digital divide, it is suggested that the increasing socioeconomic importance of ICT would add a new dimension to the already existing vicious circle between discrimination and women's backwardness. The impact, however, is expected to be particularly severe in developing countries, where four out of five women live (Cummings & Krout, 2002).

These entire discussions on digital-divides appeared to present a sense of hopelessness in relation to the 'drive to digital bridge'. Information technology is everywhere and access information is ever more important assets for individuals. In order not to leave the Orang Asli (especially the women and girls) behind ICT development or ignore the ability of ICT to facilitate social empowerment and opportunities for individuals and communities, the Project: "Needs Analysis for Telecentre Development among Orang Asli" takes into consideration concerns raised by many writers on women and ICTs. Certainly, for a technology to become an effective tool, it must fit into its community need context. Prior to this telecentre project, less attention has been paid to engage and consult the Orang Asli in community development projects. As such, most of these projects, notably Ladang Rakyat failed to achieve their specific

objectives. On their part, the Orang Asli communities, especially the females in their folds, were delighted and at the same time baffled by our approach of 'community engagement' prior to the introduction of the new technology, summarized by an elder in Pos Lanjang thus: "When they wanted our lands they didn't consult us, but now they want to give us Telecentre they are seeking our opinion, it shows things are changing".

## Methodology

This study adopts community engagement and participation in the drive to introduce ICT access and usage among the Orang Asli of Temia and Semai reside in West Malaysia. Community engagement is based on inference that it is a process which benefits community members as well as organizations or institutions. A holistic methodology whereby a mix method is employed in data collection. The results are then used to make an inference to ensure a gender-digital equality.

Past findings indicate that lack of access and training, software and hardware applications that did not reflect female interests and needs were the major barriers that constrains girls and women from utilising ICTs (Arun & Arun, 2002; Ng & Mitter, 2005; Best & Maier, 2007). However, the notion of software and hardware is difficult to understand how they deter girls or women from utilizing ICT. Obviously, training would cover the issues of soft and hardware applications. Access on the other hand, might correlate with other dimensions, including income, location, usage know-how and gender.

The subject - gender digital gap has evolved from efforts to reveal the mechanisms of this gender gap (Hacker, 1989; Lie & Sorensen, 1996b; Cohoon & Aspray, 2006b) to a discussion on how to 'bridge it' (Margolis & Fisher, 2002). The focus of the latter is mainly on schemes in encouraging girls and women to become a more active computer user (Faulkner & Lie, 2007; Trauth et al., 2009). This endeavour is part of our community engagement process during data collection in the four Orang Asli's communities.

The notion of digital gap has equally shifted attention from 'a problem with girls and women' to a problem with institutions and cultures of technology (Bagilhole et al., 2008; Matthew, 2005). Interestingly, studies on the digital divide differ in their focus and methodological approach. The methodology cited in many of the above studies appears to be over-generalising and sometimes justifies their argument with a strong extract from radical feminist viewpoints. Rather than this derive to pitch masculinity against femininity, we are of the opinion that goals of digital divide studies should focus on bridging the gender gap in terms of usage and acceptability. To achieve a gender digital equality in this project, a gender analysis is essential. This is to provide further insights on the issue of digital gap. Accordingly, Wajcman (2004) has this to say, 'while undermining gender stereotypes and masculinist accounts for modernity, the ultimate goal of feminist technology studies was, and remains, the translation of scholarship into feminist Praxis' (see also Faulkner, 2001).

Thus, the general objective of the present study is to explore the importance of communal engagement prior to setting up new technology such as ICT (telecentre). The specific aim is to develop and validate an appropriate instrument to evaluate the issues that have constantly resurfaced in many studies of this nature. We noted the importance of bottom-up approach which examines the establishment of new programmes or technologies on the basis of communal needs rather than donor or state's needs. The preliminary data were collected from four different Orang Asli's communities in the West Malaysia. Later, questionnaires were administered to the same communities. In sum, both qualitative and quantitative methods (mix-method approach) were utilized. This holistic method, enable us to engage with the respondents (female and male) directly and indirectly. Indeed, the characteristics of this study population are women and men of Orang Asli descent, aged between 16 to 60 years with strong emphasis on the communities' youth. The sampling based on area-sampling, a form of cluster random sampling that overcomes the problem of both high sampling cost and the unavailability of a practical sampling frame for individual elements (see Cooper & Schindler, 2007). The essence for both male and female representatives in this sampling is very vital especially the views of female participants. This is because

views and perspectives of women are crucial in understanding the grounds for the digital divide in a society and as a prerequisite for a solution. Our analyses address possible pull and push factors that will influence or create a gender digital divide. Some of those pull or push factors are either located within the productiveness and productiveness of the Orang Asli's society.

## Analysis

As discussed earlier, past studies indicate that lack of access and training, software and hardware applications that did not reflect women's interests and needs constitute barriers for women low usage in ICT (Arun & Arun, 2002; Ng & Mitter, 2005; Best & Maier, 2007). These findings, however, are mostly analysed based on women's perspective and little attention has been paid to the concept of gender. Huyer and Sikoska (2003) argue that different sexes will value any given technology differently. Likewise, the technology will result in different power relations between sexes. In qualifying a tool to become a 'technology', the authors suggest that the use of gender in analysis is crucial in understanding the technological environment and the way how men and women would access and use the ICT. This constitutes the most important first step in dealing with technology and empowerment relationship. Hence, the subsequent discussions on how the environments in which the ICT is being placed in the Orang Asli community setting is analysed based on a gendered perspective.

Information displayed in Table 1 highlights the fact that the Orang Asli in general (both male and female) lack awareness of the existence of the 'new object' - computer and internet. Comparing to men, fewer women have ever heard of these technologies. The result is of no surprise given the remoteness of their localities within the fringes of the rainforest, a 'catastrophe' logging road coupled with poor information and communication infrastructures, the interaction with people outside their communities is near to none existence, especially in Pos Gob. Likewise, a high proportion of the Orang Asli have little experience in using the new objects.

However, of those who have ever heard of these 'new objects', more women than men reported that they have access to the technology before (Panel B in Table 1). The women's advantage, however, is relatively small if we were to compare the gap attributed to the awareness of the technology. Moreover, this result does not necessarily imply that the Orang Asli's women as a whole have an advantage over men in using ICT. Mobile phone, could be seen as a digital gender divide in the context of the Orang Asli environment. During our fieldwork in four Pos, we observed that mobile phone ownership is higher among men. We later attribute this to male mobility and income. This is because while some young male Orang Asli own and use motorbikes, female members were never seen to possess them. This transport

**Table 1. Distribution of ever heard and used of 'new objects' by gender**

		Male	Female	Subtotal
<b>Panel A: Ever heard of</b>				
Computer	Yes	287 (43.2)	163 (35.7)	450 (40.2)
	No	377 (56.8)	293 (64.3)	670 (59.8)
Internet	Yes	214 (32.2)	121 (26.5)	335 (29.9)
	No	450 (67.8)	335 (73.5)	785 (70.1)
<b>Panel B: Ever used</b>				
Computer	Yes	58 (20.2)	39 (23.9)	97 (21.6)
	No	229 (79.8)	124 (76.1)	353 (78.4)
Internet	Yes	35 (16.4)	26 (21.5)	61 (18.2)
	No	179 (83.6)	95 (78.5)	274 (81.8)

Note: Figures in parentheses refer to the percentage.

allows male members to move within the sporadic villages and sometimes up to the nearest towns. The mobility confers them the opportunities to explore and sometimes purchase mobile phones. On the other hand, most females spend most of their time in and around domestic chores and child care. They hardly venture outside their domain or homestay.

Although the internet and computer are new to the Orang Asli, it is interesting to learn that an overwhelming majority of respondents were receptive to the proposed telecentre project in their respective Pos. The desire intensified when they step foot on Bario in November 2011 for the eBario Knowledge Fair Conference, 16-18 November 2011. The JKKK from Pos Gob with a sigh of sadness uttered,

*We are not different but the Kelabits are certainly much better off. They are well-educated, have better source of income and more successful... I really like the eBario project'. Tok Batin Kamal from Pos Lenjang said, 'I do not know much about telecentre. But I am inspired by the eBario Project'. When I return to my kampung, I will gather our people and share what I have seen and learnt in Bario. It may motivate them to emulate the Kelabits.*

Because of the telecentre projects, the living standard of affected native people in Bario, Bakalalan, Long Lamai in Sarawak and Lalarapan in Sabah to some extent have been transformed. It must be noted that telecentres in these mentioned locations are currently managed by women. This implies that ICT is an alternative mechanism to alleviate hardship and narrowed remoteness around the Orang Asli communities. We strongly believe that when ICT facilities are made available, many more communities are expected to access the technology.

However, it is necessary to state that about 7% of men and 9% of women rejected the telecentre proposal. Their objection, indeed, reflected their frustration for years development marginalisation from mainstream developments and policy makers. As remarked by one very outspoken old woman,

*... we do not need internet here. There is no oil palm, no rubber, no road. Everything remains the same after we wrote many times to the concerned authorities. The government cheated us'. A Batin further, 'we don't need internet here. You can go elsewhere. We don't need it here. We may need it at first, but we don't have money to pay for it.*

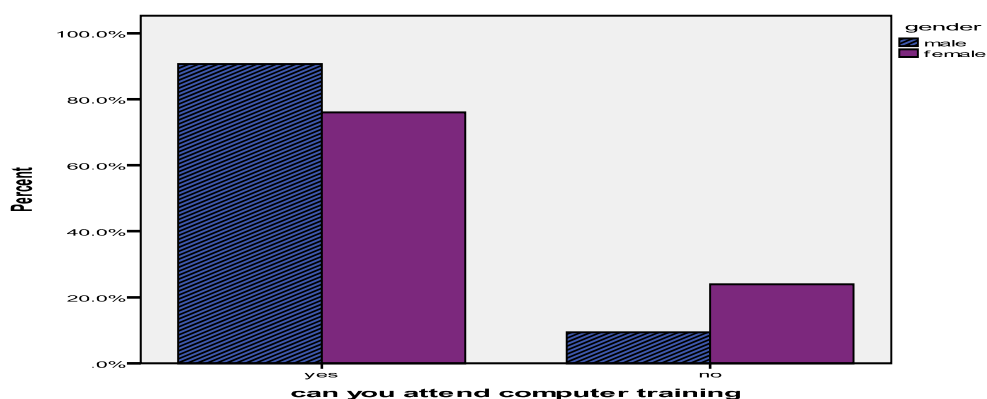
It must be noted that low awareness and usage of technologies should not be taken as an excuse not to have a telecentre project within the Orang Asli communities. We are of the opinion that they possess ability to adopt new technologies and learning new skills and knowledge for their community capacity building. In one of our participatory activities in Pos Sinderut and Lenjang, we engaged primary school children in using iPad. The children were tested later on their ability in learning, such as how to open files, manipulate photos and play games via iPad. Just like other school children, they are quick in picking up new skills and have great fun in the experiment. Put simply, to move telecentre project centre stage within the Orang Asli environment, training is a prerequisite in embracing information technology.

However, bearing in mind that divide in gender digital usage worldwide dues primarily to the lack of access and training opportunities, to avert the recurrence impede women's utilisation, training on an equal basis should receive a top priority when a telecentre project is setting up in their respective Pos. We hold the belief that in sustaining the development of telecentre project and to use it as an effective tool to overcome the existing predicament environment faced by the Orang Asli, engaging all parties equally is of crucial importance. Given the fact that ICT provides enormous opportunities in empowerment, one would expect to see a great enthusiasm and the participation of both women as well as men in ICT training, *ceteris paribus*. If we were to observe interest in attaining training is accrued to a particular group only, the worry of one sex monopolies the future usage of technology in their respective communities is unfolded.

To facilitate the discussion on gender perspective in ICT training, we focus on three issues. These include 'who should attend computer training when a telecentre is initiated in their village', 'can you attend the training' and 'which family member will you propose to attend the training'. An overwhelming

majority of respondents expressed that both men and women (male respondents=58% and female respondents=50%) should involve in the training. While 16% of men and 8% of women identified own sex to attend, less men than women opted the opposite sex to attend the course.

When we turned to ask whether the respondent can make it for the computer training, only two-third of all women as compared to 80% of men responded affirmatively (Figure 1). This, however, should not be interpreted that women are less suited or interested in ICT. Lower engagement of women in this context could be attributed to gender inequality in household, division of labour and the fact that women in these communities are overloaded with both productive and reproductive duties. For example, some of these women are pre-occupied with productive activities attached to men, such as farming. As a result, some expressed the concern of time restriction in attaining training.



Nevertheless, there is no reason to believe that little educational level contributes to women's less interest in the training. Men are of equal illiterate as well. Few problems are of concern. Some identified 'tidak berupaya'. Without seeking further clarification about the actual meaning of 'tidak berupaya', one may associate it with low literary issue or simply because of reproductive activities and productive activities, they become unavailable. All the concerned problems must be addressed when training is designed in the subsequent stage of implementation so that all individuals are motivated to engage in ICT development.

When we seek further their attitude to 'who should attend' in relation to their family members, the gender divide problem remains. Male and female respondents in general favoured oneself to the training. However, when the choices are made concerning other family members, both men and women allotted the opportunities for their sons rather than their daughters. Going beyond equal utilization of the telecentre, when both issues – who can attend and who should attend are examined simultaneously, we observed that less Orang Asli men in Kelantan are willing to commit themselves to training as compared to their female counterparts. The reverse pattern is observed in Pahang. At this point, we are not refuting the commitment of men given the fact that the odds ratio of men who responded positively in attending

**Table 1b. ICT training and gender**

	Men		Women	
	Identified himself to attend training	Do not identify himself to attend training	Identified himself to attend training	Do not identify himself to attend training
I can attend training	287	242	147	162
I cannot attend training	27	101	30	110

training course is 4.44 times more likely to identify himself in the course than men who opted for not to attend. The corresponding figure for women is 3.33. The implication of this result is the sustainability of telecentres in various Pos in the long run highly depends on the efforts, cooperation and commitments from both men and women.

Equally likely differences in gender perception towards the impact of ICT on community development are at work. If they are of the belief that ICT can be an effective device to connect to the outside world and improve their longstanding challenges of poor socioeconomic conditions, we predict individuals are more willing to spend time and attend the ICT training. The acquired basic skills would allow them to access required information as freely and equally as other information society in Malaysia. Probably because of the connection to the outside is none to existence, their low awareness of the existence and usage in ICT act as a push factor to their enthusiasm to new ideas (object) and changes that can bring to their communities with the commencement of ICT. Both men and women are optimistic that ICT can improve their living conditions, such as generating more income and health level. The contributed positive changes may cause some youths to leave their villages for a better employment prospect in the city. At least, about 14.4% of men and 20.2% of women agreed that ICT will trigger youth to leave their villages upon the set up of telecentre. Nevertheless, they are less convincing that ICT will bring negative impact to the communities (men= 9.5% and women=14. 4%).

As we hypothesised earlier, the willingness of oneself investing in ICT training is positively related to the perception that changes brought by ICT. Put simply, the more the Orang Asli believe in ICT can change the existing living conditions, the more likely both male and female will join the ICT training willingly too. This pattern is displayed in columns two and three as well as columns four and five for men and women, respectively in Table 2. It must be pointed out that differences in percentages for each statement are higher for men than for women.

**Table 2. Gender perception on changes that ICT can offer and ICT training**

Statement on the impact of ICT	Men		Women	
	Proportion responded affirmatively to the training and committed to attend	Proportion agreed to change the statement if ICT facility is provided in their respective pools	Proportion responded affirmatively to the training and committed to attend	Proportion agreed to change the statement if ICT facility is provided in their respective Pos
I like change	87.6	82.4	90.8	91.4
I like new knowledge	89.0	77.2	86.9	69.8
ICT will bring change to the community	81.0	64.4	72.4	58.2
ICT will improve the health status	64.4	54.4	60.9	53.3
ICT will generate more income	62.2	53.7	54.5	44.3
ICT will not trigger youth to leave the village	44.5	42.9	40.0	38.8
ICT will not bring bad impact	55.2	50.9	43.9	40.2

Thus far, our findings suggest that the Orang Asli women are less interested in ICT training than men. However, the reasons that account for differences in gender attitude towards ICT training are complex. To provide further insights that woman *per se* has a negative effect on ICT training, other factors that simultaneously affect women's decision such as perception towards changes ICT may offer,



age and place of residence have to be considered. In the subsequent analysis, we apply a binary logistic regression (given the nature of binary outcomes for dependent variable) to examine the extent of gender in explaining the likelihood of attending ICT training.

Our dependent variable is coded as '1' if a respondent is committed to the training when one expressed his/her wants to take part accompanied by the availability to attend the training and '0' otherwise. For the independent variable, male is assigned a value of '1' and '0' for women. The perception towards changes ICT can bring is constructed as follows: Each statement in Table 2 gives a value of '1' if a positive response is observed and '0' otherwise. The value attached to each statement is then summed up to get a total score for perception dimensions, i.e. PERC. The highest score for PERC therefore takes a value of 7 when all statements are positively responded and 0 if none of the statement is affirmatively responded. Place of residence and age are included as control variables in the model. Of those reside in Kelantan are given a value of '1' and '0' otherwise. Note that some respondents did not reveal their actual age during the process of collecting data. We, however, have information about the respondents' age category. From the computed mean age according to age category and sex, these missing age values were replaced by their respective mean age.

Consistent with other studies that men are more likely than women to use the ICT, our findings show that being a man is positively related with a commitment to ICT training, other things remain unchanged. Indeed men are about 64% more likely than women to report that they are committed to the training. The coefficient associated with residence dummy indicates that Orang Asli in Kelantan possess 75% more enthusiasm than their Pahang counterparts in training. This result is not surprising since the former live far deeper in the jungle than the latter. Likewise, the receptiveness towards benefits generated by ICT contributes positively to the training. A unit increase in their belief in ICT is associated with a 23% increment in attending the training. However, a year increase in age will lead to a four percentage decrease in commitment to follow attaining.

As presented in Table 3, the logistic model together with four explanatory variables correctly classified 67% of our respondents' commitment (both intention and willingness characteristics) in participating ICT training. The fit of the overall model as indicated by the Chi-Square value ( $\chi^2= 147.22$ ,  $p=0.00$ ), is statistically significant at the conventional level.

**Table 3. Logistic Regression result**

	B	S.E.	Wald	Sig.	Exp (B)
Male	0.495	.136	13.186	.000	1.640
PERC	0.210	.030	48.800	.000	1.234
Age	-0.040	.005	67.570	.000	0.961
Kelantan	0.561	.166	11.483	.001	1.753
Constant	-0.231	.212	1.186	.276	0.794

## Conclusion

In order not to leave anybody behind the opportunities offered by ICT, the Orang Asli must be convinced that it is worth taking time and making the effort to learn the new technology in order to mitigate their existing poor conditions be it in economic, social or educational development. However, due to their low literacy level, the content of training must take this factor into account.

The Orang Asli as a whole, welcome new ideas and technologies that will move them forward. But more importantly, they are not very particular about who spearheads the drive to improve their wellbeing and change their fortune. In making this conclusion we were able to establish that among the Temir and Semai there is a thin line, that could be overlooked, between different gender representations.

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