

Bridging the Digital Divide

Access, Adoption, Value

Kuala Lumpur, 5th December 2006



Roger Harris Associates



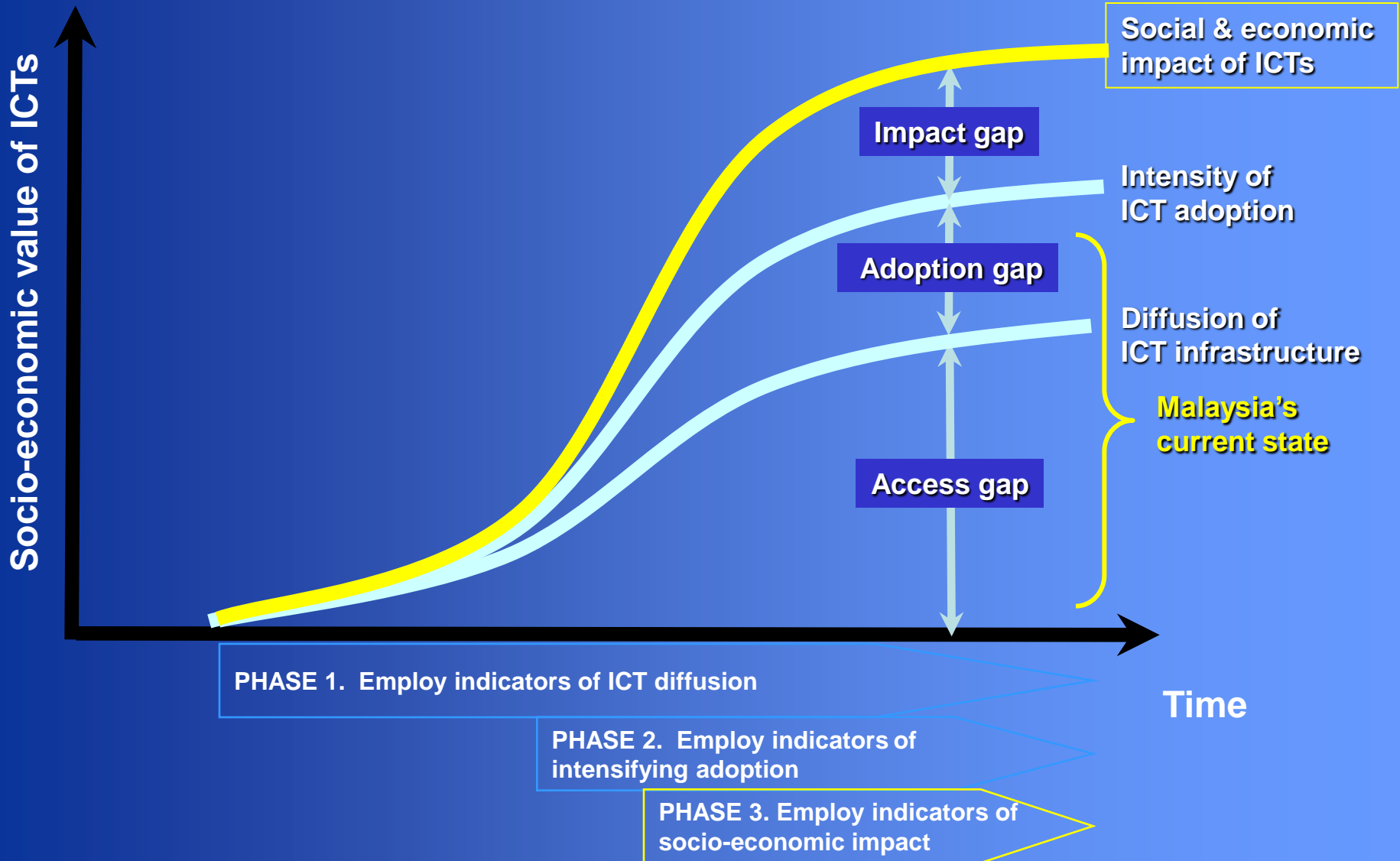
Agenda

- Understanding the digital divide
- Malaysia's digital divide
- Malaysia's socio-economic divide
- Experiences, lessons and findings
- Policies for closing the digital divide
- Framework for bridging the digital divide

Understanding the Digital Divide

- The Digital Divide is a socio-economic situation that arises when a segment or segments of society have unequal access to contemporary Information and Communication Technologies (ICTs) for gaining and contribution information/knowledge and to derive benefits there from.
- The Digital **Value** Divide is seen as that which prevents certain sections of Malaysian Society from being able to benefit from a more equitable share in the socio-economic value that ICTs are capable of generating towards the fully developed status of the Nation.
- The Digital Divide is concerned with access to ICTs.
- The Digital **Value** Divide is concerned with enjoyment of the benefits that ICTs bring.
- The term e-inclusion is used for the goal of narrowing the digital divide for the benefit of underserved sections of society.
- As ICTs by default benefit the already advantaged, it is possible to narrow the digital divide without having an appreciable impact on e-inclusion.

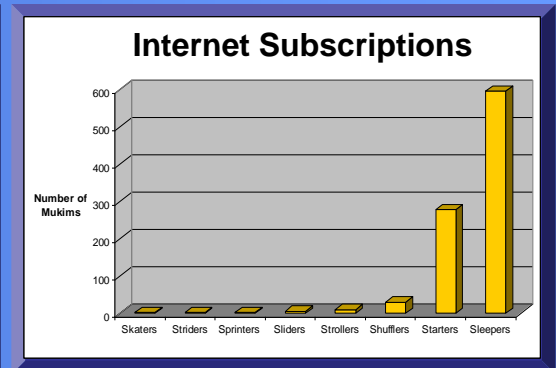
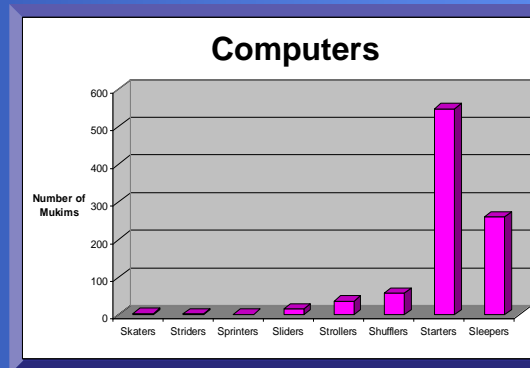
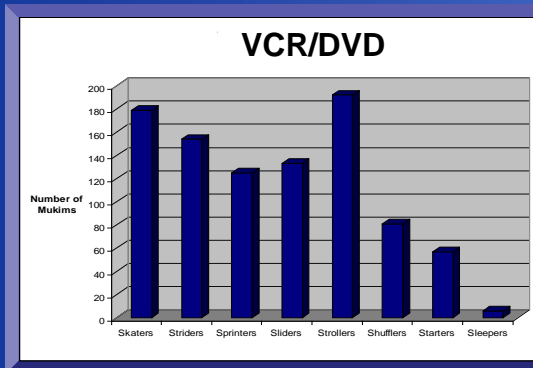
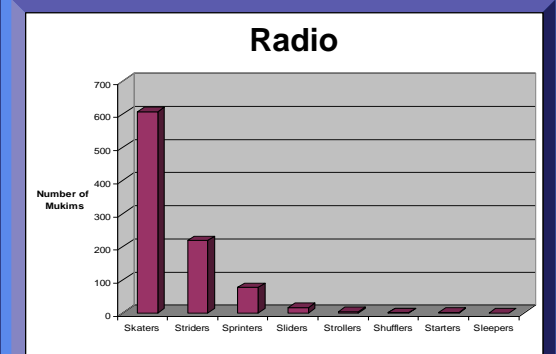
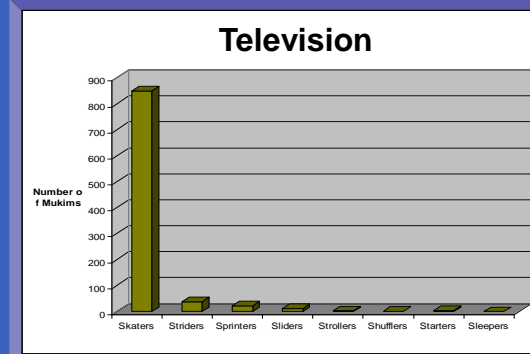
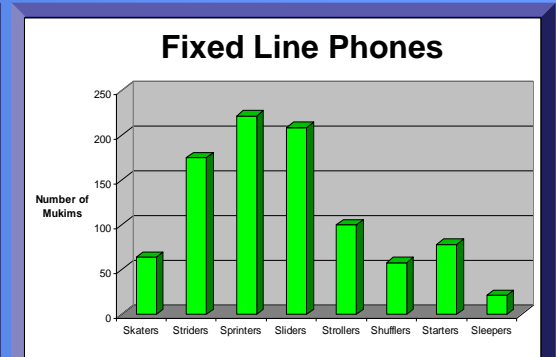
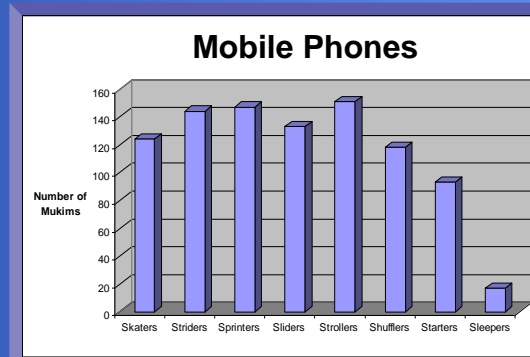
Understanding the Digital Divide



Malaysia's Digital Divide

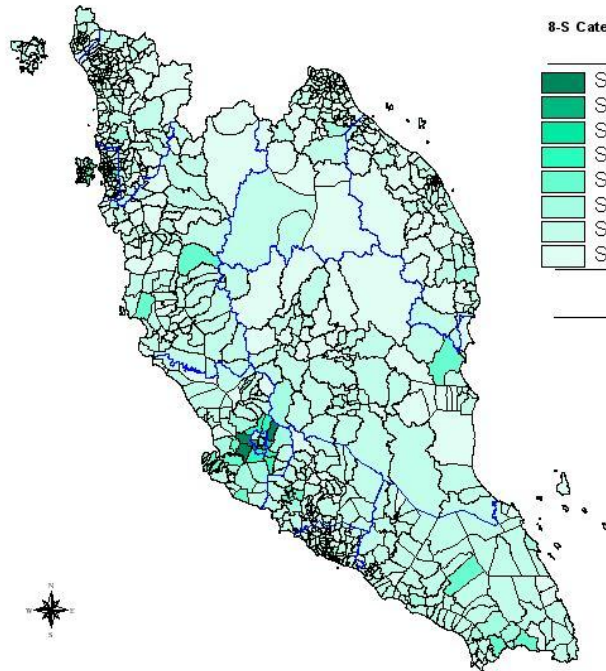
'8-S' categorisation of mukims:

1. Skaters – best performers
2. Striders
3. Sprinters
4. Sliders
5. Strollers
6. Shufflers
7. Starters
8. Sleepers – worst performers



Malaysia's Digital Divide

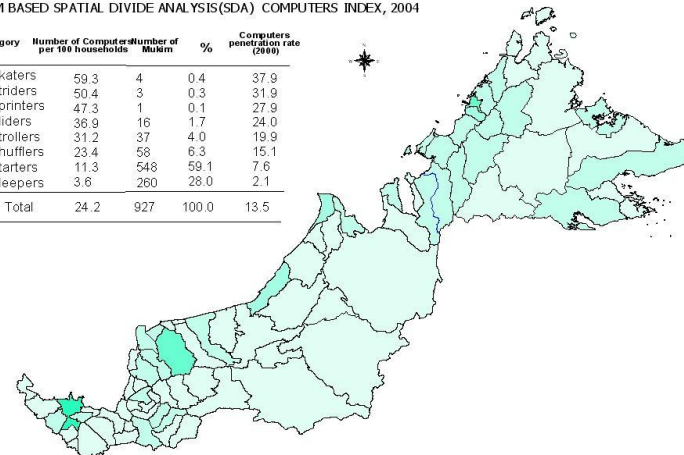
MUKIM BASED SPATIAL DIVIDE ANALYSIS(SDA) COMPUTERS INDEX, 2004



8-S Category	Number of Computers per 100 households	Number of Mukim	%	Computers penetration rate (2000)
Skaters	59.3	4	0.4	37.9
Striders	50.4	3	0.3	31.9
Sprinters	47.3	1	0.1	27.9
Sliders	36.9	16	1.7	24.0
Strollers	31.2	37	4.0	19.9
Shufflers	23.4	58	6.3	15.1
Starters	11.3	548	59.1	7.6
Sleepers	3.6	260	28.0	2.1
Total	24.2	927	100.0	13.5

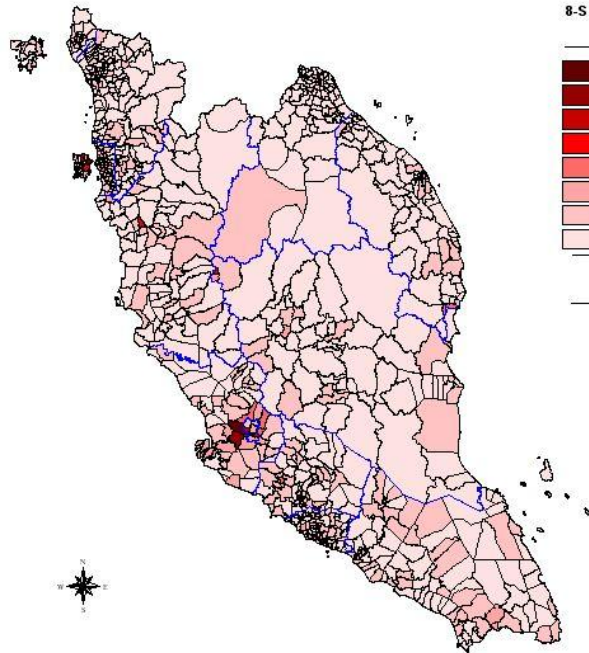
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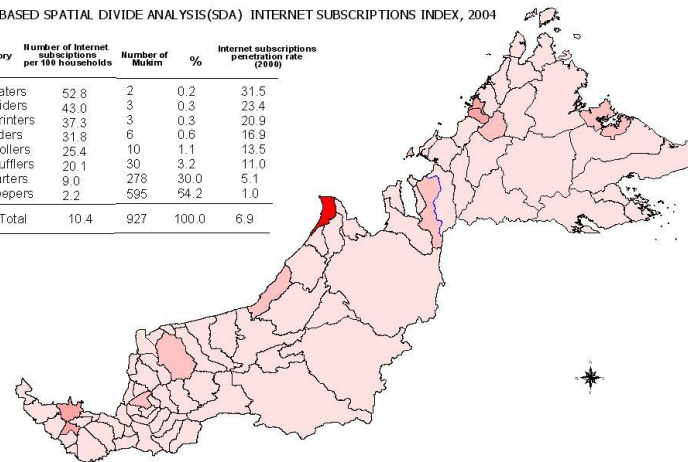
MUKIM BASED SPATIAL DIVIDE ANALYSIS(SDA) INTERNET SUBSCRIPTIONS INDEX, 2004



8-S Category	Number of Internet subscriptions per 100 households	Number of Mukim	%	Internet subscriptions penetration rate (2000)
Skaters	52.8	2	0.2	31.5
Striders	43.0	3	0.3	23.4
Sprinters	37.3	3	0.3	20.9
Sliders	31.8	6	0.6	16.9
Strollers	25.4	10	1.1	13.5
Shufflers	20.1	30	3.2	11.0
Starters	9.0	278	30.0	5.1
Sleepers	2.2	595	54.2	1.0
Total	10.4	927	100.0	6.9

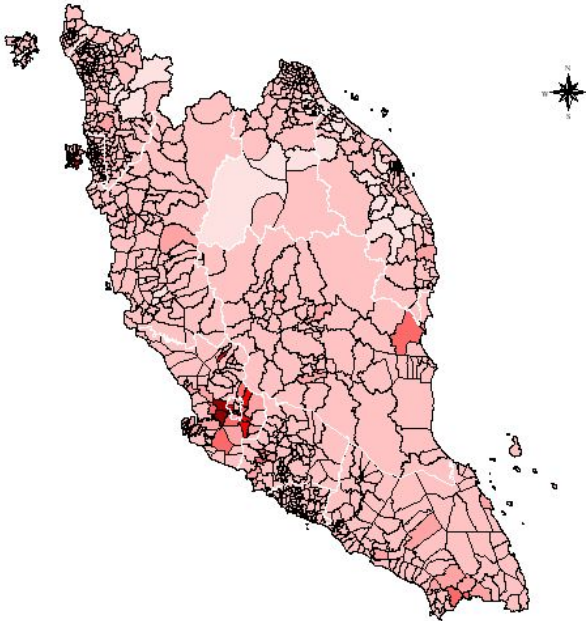
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Malaysia's Socio-economic Divide

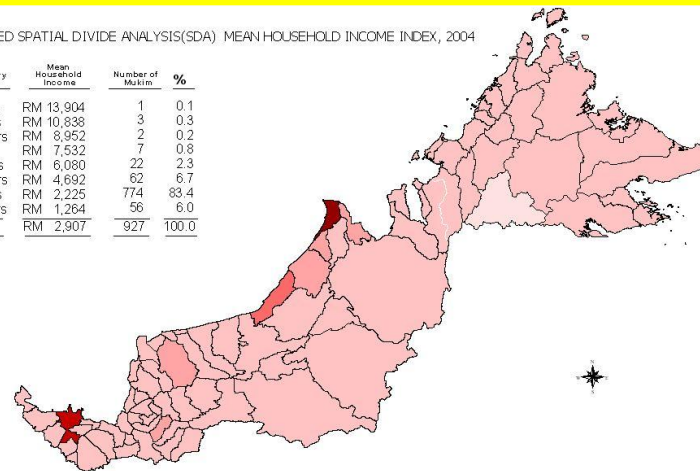
MUKIM BASED SPATIAL DIVIDE ANALYSIS(SDA) MEAN HOUSEHOLD INCOME INDEX, 2004



8-S Category	Mean Household Income	Number of Mukim	%
Skaters	RM 13,904	1	0.1
Striders	RM 10,838	3	0.3
Sprinters	RM 8,952	2	0.2
Sliders	RM 7,532	7	0.8
Strollers	RM 6,080	22	2.3
Shufflers	RM 4,692	62	6.7
Starters	RM 2,225	774	83.4
Sleepers	RM 1,264	56	6.0
Total	RM 2,907	927	100.0

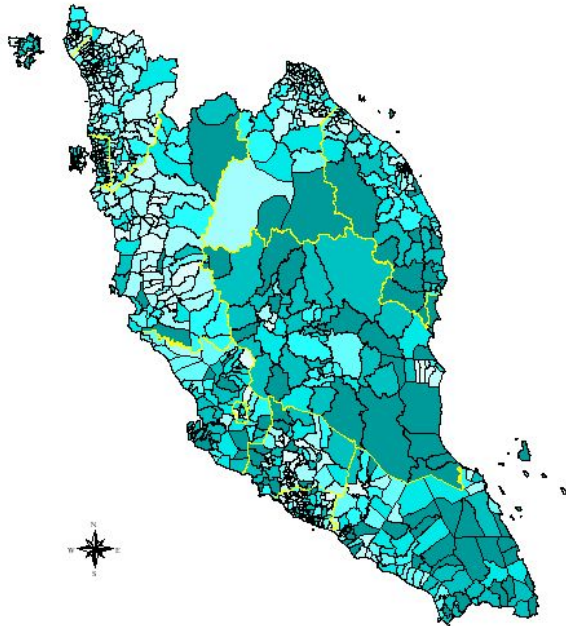
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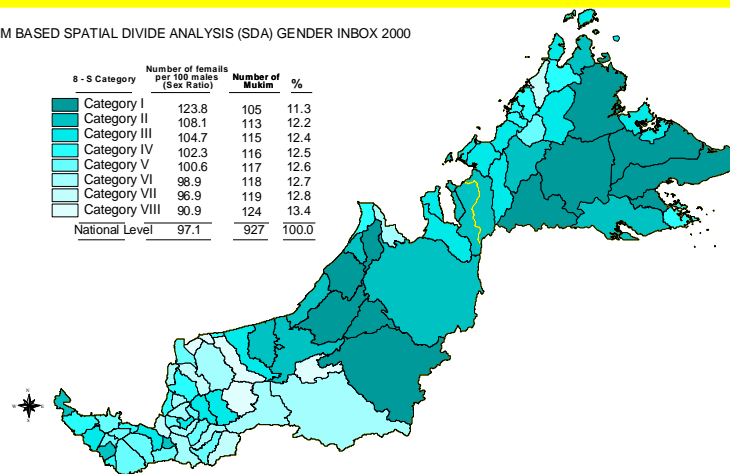
Malaysia's Socio-economic Divide

MUKIM BASED SPATIAL DIVIDE ANALYSIS (SDA) GENDER INBOX 2000



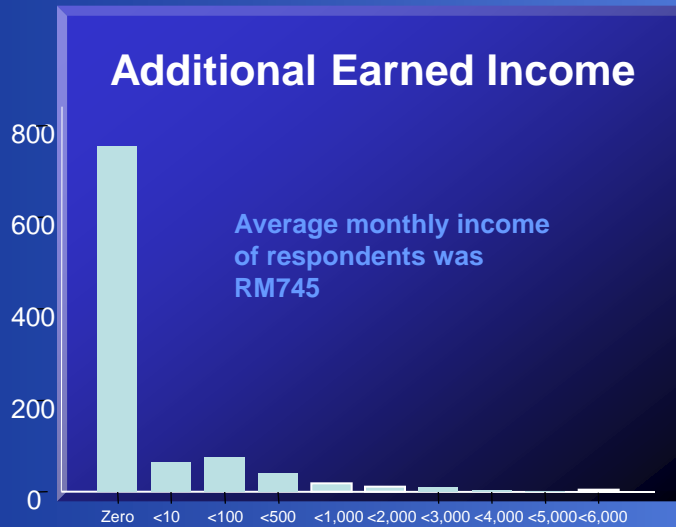
8 - S Category	Number of females per 100 males (Sex Ratio)	Number of Mukim	%
Category I	123.8	105	11.3
Category II	108.1	113	12.2
Category III	104.7	115	12.4
Category IV	102.3	116	12.5
Category V	100.6	117	12.6
Category VI	98.9	118	12.7
Category VII	96.9	119	12.8
Category VIII	90.9	124	13.4
National Level	97.1	927	100.0

MUKIM BASED SPATIAL DIVIDE ANALYSIS (SDA) GENDER INBOX 2000



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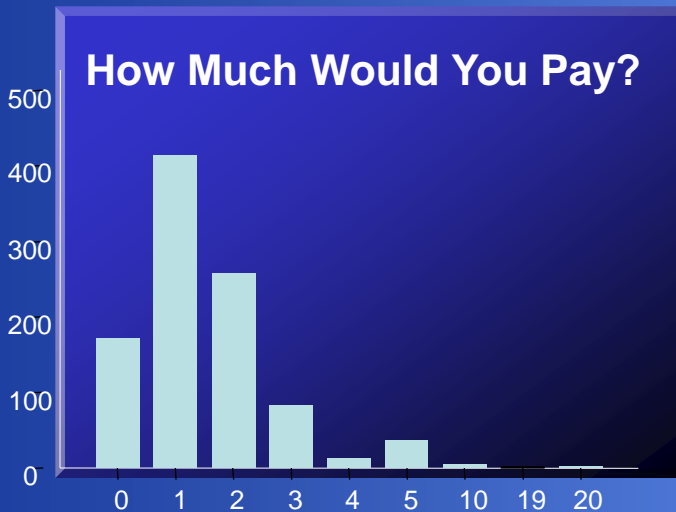
Experiences and Lessons: Pusat Internet Desa



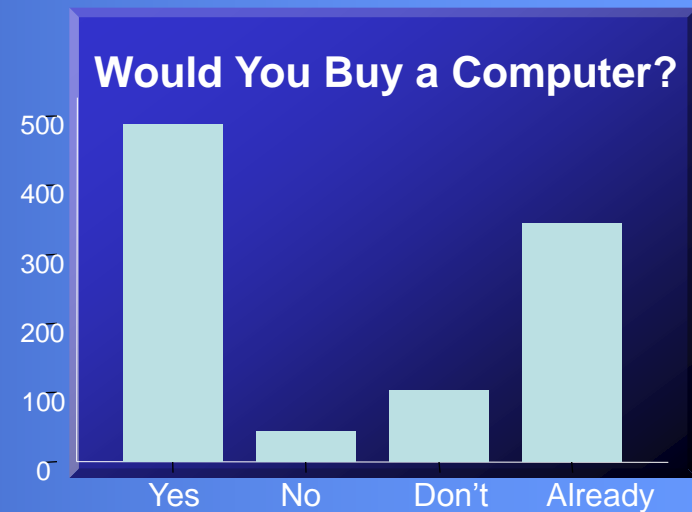
RM



RM



RM



Findings: Access and Adoption

- Malaysia's digital divide remains highly pronounced
- Mobile phones have overtaken fixed lines
- Radio and TV are at saturation
- Internet has hardly begun
- Computers are off the bottom rung
- There is a relationship between the spatial digital divide and the social divide
- Infrastructure programmes are effectively acculturating Malaysians to ICTs.
- But they are not being utilised as much as they could be to deliver socio-economic value.

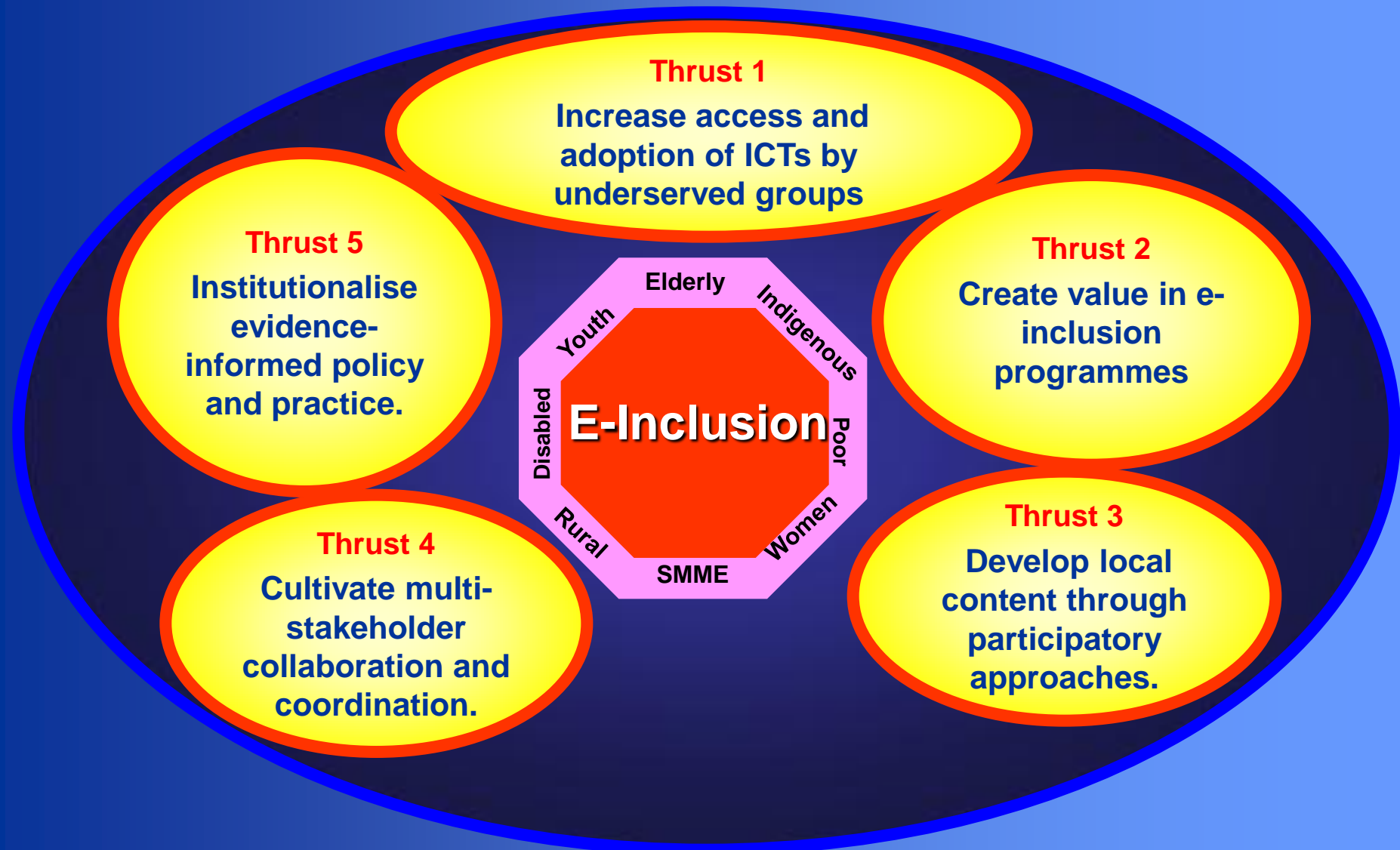
Findings: Programmes

- Current development programmes are largely uncoordinated
- Earlier lessons are not being adequately applied to current initiatives
- The reach of programmes to underserved sections of society is uneven
- Many development programmes are not making use of the most ubiquitous ICTs (Handphones, TV & Radio)
- Some programmes with ICTs are not making use of the existing ICT infrastructure
- Some programmes within the same Ministry are proceeding with their own infrastructures
- Some programmes are not taking the opportunity to use ICTs where they could

Findings: Policies

- Policies for ICTs have not been blended into policies for socio-economic development for underserved groups.
- But Malaysia has a history of effective policy making for ICTs for social inclusion.
- Current policy mechanisms are not specific about the value aspect of ICTs for achieving e-Inclusion.

Five Thrusts of e-Inclusion



Policies for Closing the Digital Divide

Thrust 1.

Increase access and adoption of ICTs by underserved groups

1. Ensure equitable access to affordable PCs and online services.
2. Increase adoption and usage of networked applications.

Thrust 2.

Create value in e-inclusion programmes

1. Target 'e-inclusion' rather than closing the 'digital divide'.
2. Infuse ICTs further within existing development programmes for underserved groups.
3. Improve the performance of telecentres to achieve and increase their socio-economic value.

Policies for Closing the Digital Divide

Thrust 3.

Develop local content through participatory approaches.

1. Adopt improved methodologies for e-inclusion programme design and implementation.
2. Provide financial support for community-based local content development.
3. Promote generic local content for customisation, interactivity and localisation.

Thrust 4.

Cultivate multi-stakeholder collaboration and coordination.

1. Integrate and co-ordinate policy-making and programme design for e-inclusion.
2. Incorporate civil society voices within the policy advisory process.
3. Increase capacity at all levels for creating e-inclusion.

Policies for Closing the Digital Divide

Thrust 5.

Institutionalise evidence-informed policy and practice.

1. Adopt improved methodologies for evaluating e-inclusion programmes.
2. Target e-inclusion indicators that measure the socio-economic benefits of technology.
3. Collect data for monitoring progress towards e-inclusion

The National Strategic Framework for Bridging the Digital Divide

E-INCLUSION

Social and Economic Inclusion in a Knowledge Society.

Employing Information and Communication Technologies (ICTs) to address the problems of the digital-divide and social exclusion and promoting opportunities for the economic and social empowerment of all citizens towards the achievement of vision 2020.



COORDINATION

Joined-up policies that embed ICTs within socio-economic development programmes

Oversight

Policy and Planning

- National IT Council
- E-Inclusion oversight committee
- E-Inclusion lead agencies committees

Partnerships

Programme Implementation

- Federal government
- State government / local authorities
- Private sector
- Civil Society (especially NGOs)



EVALUATION

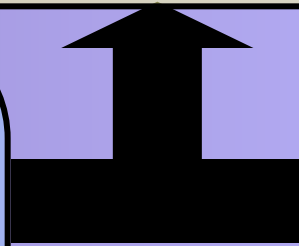
Knowledge management for evidence-based policy and practice

Evidence

- Socio-economic benefits
- Sustainability of benefits
- Funding for research & analysis (i.e. impact study, process review)

Measurement

- Systematic data repository
- Data collection (i.e. survey, usage patterns)
- Indices for goals and spatial analysis
- Digital divide database and atlas



Thank you

Q&A.