SWOT Analysis to Reviewing Business Characteristic (BCS) Survey 2019 for Integrating business and ICT Data in Indonesia

Action Area C. Integrated statistics for integrated analysis (SC2)

Which way now on the journey towards integrated statistics?

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Statistics Indonesia
Indonesia’s Business Activity Today

- Internet of Things
- Industry 4.0
- ICT

Virtual Event 15-18 June 2020
2020 Asia-Pacific Statistics Week
Leaving no one and nowhere behind

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Business and ICT Data

- company profile
- labour
- business structure
- finance & marketing
- competitiveness & innovation
- business constraints
- ICT

decision making
Statistics Indonesia and Business & ICT Statistics

- ICT Use and Utilization Survey (Businesses Sector)
- Information and Communication Businesses Survey
- Science, Technology, and Innovation Survey

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Problem: the Similarities

3 Business & ICT Surveys

organizer

observation

What the implication?
Implication: Inefficiency & Respondent Burden
Solution: Integrated Business & ICT Survey

- Information and Communication Businesses Survey
- Science, Technology, and Innovation Survey
- ICT Use and Utilization Survey (Businesses Sector)

Business Characteristics Survey
What the BCS 2019 Provides?

Business Characteristics Survey

- High quality data
- Efficient process
- Low respondent/provider burden
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
The BCS 2019 and The Dimension of Integrated Statistics

Business Characteristics Survey

Quality Dimensions³
- Relevance
- Accuracy
- Reliability
- Timeliness
- Punctuality
- Accessibility
- Clarity
- Coherence
- Comparability

Process Integration

Data Integration

Conceptual Integration

Disciplinary Integration
Integrated Survey: More Strength & Opportunity?

1. Whether the Business Characteristics Survey (BCS) as one example of an integrated survey in Indonesia has more strength and opportunity to be continued or not?

2. In what aspects the BCS shows both its internal strengths and opportunity and its external opportunity and threats?
The SWOT Analysis

- Provide text/pictures/graphics (based on session format)

**Helpful vs. Harmful**

- **S** - Strength: helpful internal
- **W** - Weakness: harmful internal
- **O** - Opportunities: helpful external
- **T** - Threat: harmful external

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## Business & ICT Survey in Indonesia

<table>
<thead>
<tr>
<th>Surveys</th>
<th>Year</th>
<th>Coverage</th>
<th>Samples</th>
<th>Response Rate (%)</th>
<th>Manpower</th>
<th>Budget (1000 USD)</th>
<th>Budget Efficiency (USD/samples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2TIK</td>
<td>2018</td>
<td>129 D 34 P</td>
<td>4537</td>
<td>79.48</td>
<td>500</td>
<td>300</td>
<td>52.45</td>
</tr>
<tr>
<td>INFOKOM</td>
<td>2018</td>
<td>29 P</td>
<td>290</td>
<td>83.90</td>
<td></td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>IPTEK &amp; INOVASI</td>
<td>2018</td>
<td>29 P</td>
<td>894</td>
<td>78.61</td>
<td>154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCS</td>
<td>2019</td>
<td>165 D 34 P</td>
<td>8300</td>
<td>84.49</td>
<td>831</td>
<td>400</td>
<td>48.19</td>
</tr>
</tbody>
</table>

*P: Province; D: District*

*Source: Statistics Indonesia*
## The SWOT Matrix Result

**Strengths**

1. Strong commitment to reducing respondent and provider burden
2. Increasing Response Rate
3. Systematics Enumerators Training
4. Technical Assistance Support by ABS
5. Good Government Support
6. Using ICT support (CAPI and CAWI)
7. Sample representativeness for estimating national statistics

**Weakness**

1. The enumerator's capability in using ICT support is varied
2. Some obstacles of IT Use in BCS 2019
3. Poor other macro data references
4. Lack of preparation and experience in implementing an integrated survey
5. Poor readjustment of instrument related to technical Assistance Bias

**Opportunity**

1. The trend of ICT use and internet users in Indonesia is promising
2. The number of stakeholders using BCS data is increasing
3. The Development of Medium Enterprise Directory as a sample framework through Statistical Business Register

**Threats**

1. A promising trend of Big Data usage by private Data Science Provider
The BCS 2019: Strength

**Strengths**
1. Strong commitment to reducing respondent and provider burden
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6. Using ICT support (CAPI and CAWI)
7. Sample representativeness for estimating national statistics

**Weakness**
1. The enumerator's capability in using ICT support is varied
2. Some obstacles of IT Use in BCS 2019
3. Some obstacles of IT Use in BCS 2019
4. Lack of experience in using ICT in BCS 2019
5. Inappropriate survey instrument related to ICT
6. Data usage by private
The BCS 2019: Weakness

**Strengths**
1. Strong commitment to reducing respondent and provider burden
2. Increasing Response Rates
3. Systematic ENUM
4. Technical Assistance is adequate
5. Good Government support
6. Using ICT support
7. Sample representative

**Weakness**
1. The enumerator's capability in using ICT support is varied
2. Some obstacles of IT Use in BCS 2019
3. Poor other macro data references
4. Lack of preparation and experience in implementing an integrated survey
5. Poor readjustment of instrument related to technical Assistance Bias
### The BCS 2019: Opportunity

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strong commitment to reducing respondent</td>
<td>1. The enumerator's capability in using ICT</td>
</tr>
<tr>
<td>and provider burden</td>
<td>support is varied</td>
</tr>
<tr>
<td>2. Increasing Response Rate</td>
<td>2. Some obstacles of IT Use in BCS 2019</td>
</tr>
<tr>
<td>3. Systematics Enumerators Training</td>
<td>3. Poor other macro data references</td>
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<td>4. Technical Assistance</td>
<td></td>
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<td>5. Good Government</td>
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<tr>
<td>6. Using ICT support</td>
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<tr>
<td>7. Sample representation</td>
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<td></td>
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<tr>
<td>Leaving no one and nowhere behind</td>
<td></td>
</tr>
</tbody>
</table>

#### Opportunity

1. **The trend of ICT use and internet users in Indonesia** is promising
2. **The number of stakeholders using BCS data** is increasing
3. **The Development of Medium Enterprise Directory as a sample framework through Statistical Business Register**
## The BCS 2019: Threat

### Strengths
1. Strong commitment to reducing respondent and provider burden
2. Increasing Response Rate
3. Systematics Enumeration Techniques
4. Technical Assistance provided
5. Good Government
6. Using ICT support
7. Sample representation for national statistics

### Weakness
1. The enumerator's capability in using ICT support is varied
2. Some obstacles of IT Use in BCS 2019
3. Relevance of establishment references
4. Experience in related survey
5. Instrument related to the development of medium enterprise directory as a sample framework through statistical business register

### Threats
1. A promising trend of Big Data usage by private Data Science Provider

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Conclusions: More Strength & Opportunity

- Business Characteristics Survey
- Information and Communication Businesses Survey
- Science, Technology, and Innovation Survey
- ICT Use and Utilization Survey (Businesses Sector)

- capability
- commitment
- Response Rate
- stakeholders
- promising
- Government Support
- Training
- Technical Assistance
- Sample
- Statistical Business Register
- ICT support

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Recommendations: Continued & Expanded

2019
BCS, Middle & Big Enterprises Industry Survey*, Prices Statistics Survey*

2020: BCS, Middle & Big Enterprises Industry Survey, Prices Statistics Survey

2021: BCS, Middle & Big Enterprises Industry Survey, Prices Statistics Survey, other new integrated survey

*) Pilot Project