

Critical decision making influenced by product Involvement, information search and information sources in Credence goods and service: Case study of implanted medical device in Thailand

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— *Review of* —
**Integrative
Business &
Economics**
— *Research* —

ABSTRACT

Critical decision making comes with high risk and uncertainty in our daily life. This situation most consumers face with service industries in consumer decision making. This research has purpose to investigate the influence of product involvement, information search and information sources in critical decision making. This research used quantitative approaches to test the hypothesis. The data were collected through telephone interviews from 200 patients list of a company. The finding indicates that there is significant relationship between product involvements on critical decision making. However, the information search and information source are not significant in Thai context in this research. Implication for future research and extended scope of the study are discussed.

Key words: Critical decision making; Involvements; Information search; information sources

1. Introduction

Information search is a one component of pre-purchasing in consumer decision making process (Neal, Quester and Hawkins, 2002). Consumer attempt to search information as much as possible in order to identify quality of service (Quester and McOmish, 2005).

However, some types of service difficult to identify the quality whether search information and used, the concepts know as credence goods (Mitchell and Greatorex, 1993). In this type of service, service provider will have more knowledge than consumer (Bonroy, Lemarie and Tropeano, 2012) which make difficult for consumer in decision making especially medical treatment (Emmons, 1996) and high risk situation (Mitchell, 1994). Moreover, there are several sources of credence goods in many industries such as Lawyers consult, mechanics (Dulleck & Kerschbamer, 2006), tax consultant, marketing research service, therapist (Mitra, Reiss & Capella, 1999) and healthcare services (Emmons, 1996; Mortimer & Pressey, 2013). All of this types of service are a one characteristic in service industry which difficult to define the outcome of service provider or quality of product which we consumer cannot avoid to choose the alternative. Critical decision making with high risk (Zeithaml, 1981) and uncertainty which probably give negative impact need

Special concerned in alternative (Pomales, 2015). Credence goods were concerned in different form of decision making which are hard to evaluate in consumer experience from credence services when compare with search and experience in service industry (Hsieh et al., 2005; Murray & Schlacter, 1990; Zeithaml, 1981) which have high involvement and uncertainly in buying products and service which degree of involvement relate with

information search (Assael, 1998). Future more, information search become a crucial factor in critical decision making of this types of product (Moorthy et al., 1997) which attempt to reduce high risk and uncertainty from using product (Mitra, 1999; Mortimer & Pressey, 2013) and involve with information source in finding, diligent of searching the information and type of the data source (McCull-Kennedy & Fetter, 1999; Beatty & Smith, 1987) which Consumer give priority from the information in time spending in high risk products (Newman & Staelin, 1971,1997; Murray, 1991) than the other types of goods. Both information search and information source are important in critical situation in high involvement, high risk and uncertainty. Furthermore, service provider as expert (Fragale & Heath, 2004) become an important role in personal consult with consumer in this situation (Guilitinan, 1987) which have higher level in customization than consumers goods or other products (Guilitinan, 1987; Zeithaml, 1981) Moreover, Credibility of service provider become an important thing in decision making in customer who lack of experience in credence service (Ngamvichaitkit, 2014). For example, patient who did not have knowledge in health care industry or in medication (Edwards & Elwyn, 2006) Service provider will be the one who are the source of information to consumer in high risk situation, uncertainty and customization especially in healthcare sectors (Buntin et al., 2006).

In this study choose the implant medical device to illustrate the critical decision making because in healthcare service is one of the high involvement, risk and particular in credence services (Ngamvichaitkit & Beise, 2014) which the important role credibility of service provider become crucial (Rich & Danielson, 2007).

Implant medical device is the important of product and service which were categorized in credence goods because this product will become one part of person who has surgery in their body. In addition, the outcome of medication become uncertainty and depend on physical condition of each person include psychological factors which uncertainty.

There are several recent research studies on consumer decision making on credence goods and service in general. However, there is very little research study on critical decision making by applied the concepts of critical decision method by G.A. Klein (1944) from psychology fields that involve with decision making in case of implanted medical device.

This reteaches will be benefit for both practitioner and academicians for planning and implementing marketing strategy.

2. Literature Review

2.1 Critical decision making in Credence service and involvement

Involvement was defined as the level of perception based on individual need, value and interest which involve with things (Zaichkowsky, 1985). Researchers categorized the involvement in two types; importance which based on cognitive perspective and interest which composed of emotional components (McQuarrie & Munson, 1992). In addition, some researchers proposed that the level of involvement influence with information search (Assael, 1998) and consumer decision making (Celsi&Olson 1988; Richins & Bloch 1986). Important of high involvement found crucial in credence goods and service than search and experience products. While, interest was investigated that lower important in credence goods and service (Mortimer & Prssey, 2013). However, the previous study gives the information in general types of credence goods and service. Then, this study will reexamine in specific case of implant medical device of consumer decision making in critical situation by imply that;

H₁. Critical decision making in credence service will be affected on high involvement in important factor than interest.

2.2 Critical decision making in credence service and information search

Information search is a crucial factor in consumer decision making (Moorthy et al., 1997). The researcher has categorized to internal and external sources (Moorthy et al., 1997). There is recent study believed that external sources from academic researchers and experience practitioners crucial in consumer decision making (Perdue, 1993).

Then, Consumer searched is a common method implemented by consumer to reduced perceived risk (Mitra, 1999). As perceived risk and information search are significant relationship with credence service in high level of information required (Murray, 1991; Newman, 1977). Similarly, the researcher claims that there is the relation between information search and information source in reducing risk in several types of service (Mitra, 1999). Future more, the research defined external source as increasing products and service knowledge, reducing in obtaining risk and uncertainty, and increasing post purchase satisfaction (Mortimer & Pressey, 2013).

Another important thing is the researchers found the relationship between perceived risk and information search significant relationship (Murray, 1991; Newman, 1977). There are several source in reducing perceived risk such as increased brand loyalty (Bauer, 1967; Lutz and Reilly, 1973) or seeking additional information about product or service (Crocker, 1986; Eigler and Langeard, 1977; Hugstad et al., 1987; Zeithmal, 1981; Lutz and Reilly, 1973; Davis et al., 1979). Moreover, time spending in searching information influenced by produced categorized and high risk situation (Newman and Staelin, 1971). Bloch and Ricins (1983) supported this statement in his studied and additional result in consumer effort in different type of products. There are two main study information search and credence service. Frist, Mitra (1999) conducted the research in US college student. The result illustrated consumer spending time of information search in credence service

With higher risk than experience and services. However, the limitation of this study is not cover in all perspective which neglect in internal and external search but focusing on personal and impersonal sources of information. Future more, McColl-Kenedy and Fetter (2001) found the significant relationship between the degree of involvement and external sources information. However, from the previous researcher showed in different result that there is no significant difference of information search in credence and non-credence service but there is significant relationship in opinion of sale representative, friends' experience and content from consumer reports (Mortimer & Pressey, 2013). On the other hand, this study will conduct the hypothesis in Thailand context in implant medical device industry as one form of credence goods which have perceived in higher risk than the others.

H₃ Critical decision making in credence service higher influenced by external sourced of information than internal sources.

2.3 Credence service and information sources

Information sources is the part of information search from external search information which include attempt in searching, and form of information seeking (McColl-Kennedy & Fetter, 1999; Beatty and Smith, 1987). Information source were divided into four components in applied and tested in service industries (Murray, 1991; Mitra et al., 1999).

Impersonal advocate (print and broadcast media)

Impersonal independent (popular articles and broadcast programming)

Personal advocate (sales representative)

Personal independent (friends and relatives) (Andreasen, 1968)

The result from recent studied shown that in high degree of risk perception consumer will reliable on personal independent such as friends and relatives than impersonal sources (Mortimer & Pressey, 2013). There are several studied illustrate that personal sources were used often in studying credence services than the other types of products (Mitra et al., 1999). This study will find the sources of information in critical decision making of credence service in context of healthcare provider in Thailand by focusing on personal sources of information both personal advocate and personal independent whether influence than the other

H_{4.a} Impersonal advocate influence in consumer critical decision making.

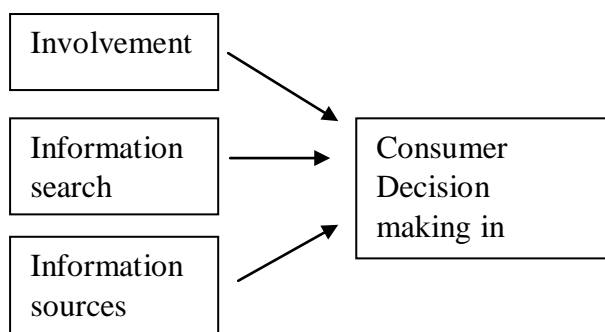
H_{4.b} Impersonal independent influence in consumer critical decision making

H_{4.c} Personal advocate influence in consumer critical decision making

H_{4.d} Personal independent influence in consumer decision making

3. Theoretical framework

This study using the concept model from search and credence service in service provider perspective conducted by Mortimer & Pressey (2013). This model was primary examined in the research of perceived risk, information in search, experience and credence services by Mitra, Reiss & Capella, 1999) which there some limitation in their study. The samples of them are college student in consumer decision making in three types of services industries. Even though, the model was developed and applied by Mortimer & Pressey, 2013 which focuses on information search in credence services. This research investigated involvement levels and information search activity in consumer purchasing credence services.



This model will be benefit for the academic and practitioners in relate fields which can be apply in credence service industry in developing service and implementing marketing strategy.

4. Methodology

Self-administered questionnaire and telephone interview were conducted in this study to collect the data from the patient both clinical and hospital. The questionnaire divided into several part in order to measure variable following the hypothesis. The result will show in the form of quantitative research of the significant variable in critical decision making.

5. Sample

The sample of this research is patients who implanted electronic medical device in their body for therapy. This case focus on two types of electronic medical device on cochlear implanted and vagus nerve stimulation. The sample of this study comes from 200 patient's information from company data during 2013-2015. There are 140 respond questionnaires through telephone interview and 60 persons rejected the interviews.

6. Measurement

6.1 Independent

Product involvement measurement were adopt from Leanne Max (2010). The form

Of questionnaire of previous researches

used qualitative approaches. However, in this paper modify the questionnaire to rating scale from 1-10 in order to measure the influence on critical decision making.

6.2 Dependent Critical decision making applied the concept of decision making methods from

Gary A. Klein (1996) to measure the dependent variable in form of rating scales from 1-10. The correlation between dependence and independence were test in this research. The result indicated Figure 1 below.

7. Results

Table 1

R	R Square	Durbin-Watson
.268	.072	1.346

Table 1 and Table 2 shown the information from investigating in this research, the researchers investigated the error degree of freedom by using Durbin-Watson. The result explored value of "the error degree of freedom" at 1.346. Moreover, the relationship between variable which influence on critical decision making. In this research R square explained product involvement, information search, information sources on critical decision making in credence goods: in case of implanted medical device at 7%.

Table 2

	B	Beta	t	Sig
(Constant)	7.926		12.740	.000
INV_MEAN	.140	.181	2.158	.033
INSE_MEAN	-.055	-.119	-1.410	.161
INSO_MEAN	.187	.121	1.433	.154
Dependent Variable: CDM_MEAN				

The regressions coefficients in unstandardized(B) and standardized (Beta) of product involvement at significant relationship at 0.033(0.140 and 0.181), information search significant level at 0.161 (-0.055 and -0.119), information sources significant level at 0.154(0.187 and 0.121) on critical decision making, respectively. In considered of constant value at H0: $\beta_0=0$ and H1: β_0 not equal zero on statistical test at $t=12.740$ and at Sig $0.000<0.05$ reject H0 at β_0 not equal zero. Then, the regression can show on form of this equation: $\text{Regression} = \text{CDM_MEAN} = 7.93 + 0.140B1 - .06B2 + .19B3$ R-square= 7%.

Finally, the result illustrated product involvement have significant relationship on critical decision making in credence goods at significant level 0.033 which Sig $0.000<0.05$ reject H0 at β_0 .

8. Discussion

The result from these researches gives the interesting outcome and extended the scope in this field. First, high involvement is the only one significant relationship on critical decision making on credence goods in this research. In this part the finding similar from previous research in the relationship between product involvement and credence goods (Perdue, 1993; Celsi&Olson 1988; Richins & Bloch 1986). While, information search and information sources were expected to influence on critical decision making reveal different results. The recent researches claim that both information search and information source are significant on consumer decision making in credence goods in reducing perceived risk (Mitra, 1999; Mortimer & Pressey, 2013). However, This consumer context are different in this researches. The researchers imply that the finding come from several reasons. For instance, technology development growth dramatically is the important impact on information search and information sources nowadays. However, the concepts that adopt from G.A. Klein (1989) did not covered the internet sources. Moreover, there are several researchers applied information sources in general by Murray, 1991; Mitra et al., 1999). The researchers suggest that the concepts of information sources should modified or selected some specific sources in case of critical decision making with high risk and uncertainty. There some recent researcher's claims in product and service that consumer lack of knowledge, they will believe on expert than the other sources (Bonroy, Lemarie and Tropeano, 2012). It leads to another to concern in the future study on specific credibility of expert and service provider than others sources. In addition, information search in This context, the result gives the similar between internal and external sources. Moreover, cultural difference is the interesting for multinational company in studying a unique characteristics country (Rasch,2015).

9. Conclusion

These researches investigate critical consumer decision making influenced by product involvement, information search and information sources. The purpose of this study is extended knowledge and scope of the study in this fields by adopt the concept of information search and information source in credence service by Mortimer & Pressey(2013). The concept of critical decision method by G.A. Klein (1989) was added in this model to study critical decision making on credence goods. The concept was applies to explained non routine situation in critical decision making in psychology fields. The quantitative approaches were conducted through semi-structured questions from 200 respondents. The finding of the

research explored some different results from similar researches. The high product involvement revealed the significant relationship on critical decision making on credence goods: in case of implanted medical device while information search and information sources are not significant in this study. However, the result benefit for both marketers and academic in future study in this topic in order to modify the concept to suite with the present time.

10. Implication & Limitation

The implication of this study benefits both practitioners and academicians in the fields of marketing. This understanding in product involvement, information search and information search lead to appropriate design marketing strategy included marketing communication: media, advertising and communicate to suite with this target customers. Moreover, this researched explored some limited of the concepts of critical decision methods in form of narrow scope in information search and information sources. In addition, for the future study information source in specific sources is the interesting to concern. The researchers suggest that for future study the concepts should develop the idea to suit with the present time by added some variable for further study in information search and information sources.

On the other hand, these types of research were limited in patient data collection which spends long time in asking for permission from both sources of information. Moreover, Implanted medical device patient were limited number in Thai society when compare with Thais population. In addition, there are rarely few theory to use in explanation of critical decision making directly. Then, the researchers needs to find or adopt the similar model to explain in this situation that lead to the future research in developing this concept to explained the phenomenon directly. However, The benefit of this theory was expected to use and apply in high risk product and service in critical making decision in the other fields.

Appendix a



แบบสอบถามเพื่อการวิจัย

คำชี้แจง

แบบสอบถามชุดนี้เป็นส่วนหนึ่งของการศึกษาหลักสูตรบริหารธุรกิจดุษฎีบัณฑิตสาขาวิชาการตลาดมหาวิทยาลัยอัสสัมชัญ (Assumption University) โดยมีวัตถุประสงค์เพื่อศึกษาการตัดสินใจที่มีความสำคัญและขบวนการได้การตัดสินใจซื้อสินค้าประเภทที่มีความน่าเชื่อถือ (credence goods) เพื่อใช้เป็นข้อมูลและประโยชน์ในการ

ประกอบการตัดสินใจกำหนดนโยบายดำเนินการกลยุทธ์ทางการตลาดและสอดคล้องกับความต้องการของลูกค้าและให้เกิดประโยชน์สูงสุด
ข้อมูลของท่านจะเป็นประโยชน์อย่างยิ่งในการทำวิจัยและนำไปวิเคราะห์ในภาพรวมดังนั้นผู้วิจัยจึงใคร่ขอความร่วมมือจากท่านในการตอบแบบ
สอบถามทั้ง 4 ตอนดังนี้

ตอนที่ 1 ข้อมูลลักษณะทางประชากรศาสตร์ของผู้ตอบแบบสอบถาม

ตอนที่ 2 ข้อมูลเกี่ยวกับประเภทที่แตกต่างกันของการรักษา(Involvement)

ตอนที่ 3 การค้นหาข้อมูล(Information search)และแหล่งข้อมูล(Information source)

ตอนที่ 4 ความน่าเชื่อถือข้อมูลของผู้ให้บริการส่วนบุคคล(Individual Source Credibility)

ขอขอบคุณในความร่วมมือ

นักศึกษาริษฎาเอกภาควิชาบริหารธุรกิจ

สาขาการตลาดมหาวิทยาลัยอัสสัมชัญ



แบบสอบถาม

เรื่อง การตัดสินใจที่มีความสำคัญในสินค้าที่มีความน่าเชื่อถือ (credence goods)

ในกรณีศึกษาของเครื่องมือแพทย์ชนิดผ่าตัดใส่ในร่างกาย (Implanted medical device)

ส่วนที่ 1 ข้อมูลลักษณะประชากรศาสตร์ของผู้ตอบแบบสอบถาม

คำชี้แจง โปรดทำเครื่องหมาย ลงใน หรือเติมข้อความในช่องว่างให้ตรงกับความจริง

1. เพศ

ชาย

หญิง

2. อายุ

ต่ำกว่า 25 ปี 25-29 ปี 30-35 ปี 36-40 ปี 41-45 ปี มากกว่า 45 ปี

3. อาชีพ

ข้าราชการ/รัฐวิสาหกิจ พนักงานบริษัทเอกชนประกอบธุรกิจส่วนตัว พ่อบ้าน/ แม่บ้านอื่นๆ โปรดระบุ

4. รายได้ต่อเดือน

ต่ำกว่าหรือเท่ากับ 10,000 บาท 10,001 – 20,000 บาท20,001 – 30,000 30,001 – 40,000 บาท มากกว่า 40,000 บาท

5. ระดับการศึกษาสูงสุด

อนุปริญญา (ปวส.) หรือเทียบเท่า ปริญญาตรีปริญญาโท สูงกว่าปริญญาโท

ส่วนที่ 2

ข้อมูลเกี่ยวกับประเภทที่แตกต่างกันของการรักษา (**Involvement**)คำชี้แจง การตัดสินใจที่มีความสำคัญมีผลต่อระดับการรับรู้ในข้อมูลในด้านใดบ้าง

2.1 ทางเลือกของการรักษาและประเภทของการรักษาที่มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.2 สิ่งที่เกี่ยวข้องกับการรักษา(Involvement) วิธีการที่ใช้ในการรักษา มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.3 บทบาทของญาติและคนใกล้ชิดของคนไข้ที่ได้รับการรักษา มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.4 ประโยชน์ของการรักษาที่แตกต่างกันตามช่วงอายุ มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.5 ผลหรือเป้าหมายของการรักษา มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.6 ระยะเวลาที่การรักษาเห็นผล มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.7 ระดับผลข้างเคียงของการรักษาที่มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.8 ข้อดีข้อเสียของการรักษาแต่ละประเภทมีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.9 รูปแบบของการรักษา (ยกตัวอย่างเช่นกิจกรรมฟื้นฟูสมรรถภาพผู้ป่วยทั้งแบบเดี่ยวและแบบกลุ่มและการแนะนำในการดูแลผู้ป่วยในเด็กสำหรับผู้ปกครอง)	1 2 3 4 5 6 7 8 9 10
2.10 สิ่งที่คนไข้จะได้รับในการรักษา มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.11 .สิ่งที่ญาติและคนใกล้ชิดต้องทำในขั้นตอนของการรักษา มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.12 ความรู้ของบุคลากรทางการแพทย์ที่ได้รับการอบรม มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10
2.13 ประสบการณ์ของผู้ให้บริการทางการแพทย์ มีความสำคัญหรือไม่	1 2 3 4 5 6 7 8 9 10

2.14 ระยะเวลาในการเริ่มต้นของการรักษา มีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10
2.15 สถานที่ให้บริการของการรักษามีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10
2.16 ความถี่ของการเข้ารักษาและติดตามผล มีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10
2.17 ค่าใช้จ่ายในการรักษา มีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10

ส่วนที่ 3

ส่วนที่ 3 การค้นหาข้อมูล(Information search)และแหล่งข้อมูล(Information source)

ในการตัดสินใจที่มีความสำคัญนั้นมีหลายบุคคลที่มีส่วนช่วยในการให้ข้อมูลที่เกี่ยวข้องกับการใช้บริการต่างๆเป็นจำนวนมาก โดยข้อมูลนี้ได้ถูกแสดงในวิธีที่แตกต่างกัน (ยกตัวอย่าง เช่น brochures, การพูดคุยแลกเปลี่ยนกับผู้ให้บริการ, ช่องทางผ่านอินเทอร์เน็ต) และจำนวนของรายละเอียดที่แตกต่างกัน ความคิดเห็นของคุณมีส่วนช่วยในการพัฒนาข้อมูลของผู้ให้บริการ

1.การแสวงหาข้อมูลจากภายใน จากประสบการณ์จากการเรียนรู้ มีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10
2.การแสวงหาข้อมูลจากภายนอก จากผู้มีประสบการณ์จากคนใกล้ชิด มีความสำคัญหรือไม่	1	2	3	4	5	6	7	8	9	10

3.1 แหล่งข้อมูล (Information source)

กรุณาระบุจำนวนของข้อมูลที่ได้รับจากแหล่งข้อมูลต่างๆในการหาข้อมูลที่ใช้ประกอบในการตัดสินใจจากตัวเลือกดังต่อไปนี้ในรูปแบบ มาก หรือ น้อย

ข้อมูลเกี่ยวกับการใช้งานอุปกรณ์ทางการแพทย์ชนิดผ่าตัดฝังในร่างกาย

- | | | |
|--|-----|------|
| 1. โทรทัศน์ สื่อโฆษณา | มาก | น้อย |
| 2. สื่อสิ่งพิมพ์ บทความวิชาการ บทความทางการแพทย์ | มาก | น้อย |
| 3. ผู้แทนฝ่ายขาย | มาก | น้อย |
| 4. เพื่อน คนใกล้ชิดและครอบครัว | มาก | น้อย |

แหล่งข้อมูลอื่นที่ไม่ได้ถูกกล่าวถึงในแบบสอบถามข้างต้นที่ทำให้ผู้ใช้บริการได้รับข้อมูลอย่างทั่วถึง

ข้อความ	1	2	3	4	5	6	7	8	9	10
1. การแสวงหาข้อมูลเป็นตัวช่วยในขบวนการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
2. การแสวงหาข้อมูลเป็นการช่วยให้ไปถึงประสบการณ์ในอดีตที่มีส่วนช่วยในการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
3. การแสวงหาข้อมูลทำให้เห็นถึงมาตรฐานการทำงานที่มีคุณภาพของผู้ให้บริการที่มีผลต่อการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
4. การแสวงหาข้อมูลช่วยในการให้ข้อมูลตามที่ตั้งเป้าหมายและวัตถุประสงค์ไว้ช่วยในการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
5. การหาแสวงหาข้อมูลแสดงให้เห็นถึงตัวเลือกที่ใช้ในการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
6. การแสวงหาข้อมูลเปิดเผยถึงข้อมูลที่เฉพาะเจาะจงถึงผู้ให้บริการที่มีผลต่อการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
7. การแสวงหาข้อมูลมีส่วนช่วยอธิบายในการตัดสินใจในทางเลือกอื่นๆ	1	2	3	4	5	6	7	8	9	10
8. การแสวงหาข้อมูลช่วยให้เห็นภาพถึงผลที่จะเกิดขึ้นซึ่งมีผลช่วยในการตัดสินใจ	1	2	3	4	5	6	7	8	9	10
9. การแสวงหาข้อมูลทำให้เกิดการตัดสินใจที่ถูกต้อง	1	2	3	4	5	6	7	8	9	10
10. การแสวงหาข้อมูลเป็นวิธีที่มีประสิทธิภาพในการช่วยตัดสินใจ	1	2	3	4	5	6	7	8	9	10



Questionnaire

Topic: Critical Decision Making Influenced by Product Involvement, Information search and Information sources

in Credence Goods and Service: Case study of Implanted Medical Device in Thailand

Part 1 Demographic Information

11. Gender

Male

Female

12. Age

Less than 25 year old

25-29 years old

30-35 years old

36-40 years old

41-45 years old

More than 45 years old

13. occupation

Government officer

Private employee

Entrepreneurship

homemaker

Other occupation please identify.....

14. Income

Less than or equal 10,000 Baht 10,001 – 20,000 Baht

20,001 – 30,000 Baht 30,001 – 40,000 Baht

More than 40,000 Baht

15. Education

Diploma

Bachelor degree

Master degree

Higher than Master degree

Part 2

2.1 The specific choices or types of treatments that are available.	1 2 3 4 5 6 7 8 9 10
2.2 What treatment involves.	1 2 3 4 5 6 7 8 9 10
2.3 The role of relative and close friends in treatment	1 2 3 4 5 6 7 8 9 10
2.4 The result from treatment which gain different outcome in different age	1 2 3 4 5 6 7 8 9 10
2.5 What is the goal or outcome of treatment?	1 2 3 4 5 6 7 8 9 10
2.6 How long does it take for the treatment to produce results?	1 2 3 4 5 6 7 8 9 10
2.7 The level of side effect from medication	1 2 3 4 5 6 7 8 9 10
2.8 The advantage and disadvantage of each type of treatment	1 2 3 4 5 6 7 8 9 10
2.9 The format of treatment (one-to-one consult, group consult and follow up)	1 2 3 4 5 6 7 8 9 10
2.10 What is the expert will be doing in treatment	1 2 3 4 5 6 7 8 9 10
2.11 What the relative and close friends need to do during treatment	1 2 3 4 5 6 7 8 9 10
2.12 What is important of Special skill and knowledge training of medical staff and expert	1 2 3 4 5 6 7 8 9 10
2.13 How is experience of service providers important?	1 2 3 4 5 6 7 8 9 10
2.14 How long the medication has been used in therapy	1 2 3 4 5 6 7 8 9 10
2.15 Physical environment of medication	1 2 3 4 5 6 7 8 9 10
2.16 How often would patient come for appointments?	1 2 3 4 5 6 7 8 9 10
2.17 The expense of treatment.	1 2 3 4 5 6 7 8 9 10

Part 3 Information search and Information sources

3.1 Information search

Pleas identify which information search both internal and external search of information that you use to finding the information in implanted medical device.

1. Internal search of information(personal experience, internal learning and internal perception)	1	2	3	4	5	6	7	8	9	10
2. External search of information (expert, relative, close friends and family)	1	2	3	4	5	6	7	8	9	10

3.1 Information source

Please identify the level of information which gain from any sources of information whether high or low following list below.

Which channel do you gain the information of implanted medical device?

Pleas identify more or low level in gaining information

- | | | |
|--|------|-----|
| 16. Television and advertisement | High | low |
| 17. Academic paper, journal and academic publication | High | low |
| 18. Sale Representative | High | low |
| 19. close friends, relative and family | High | low |

Pleas identify other sources of information that dis not covered on the classify list

ข้อความ	Not important					very important				
1. Information search hint the way to make a decision making process.	1	2	3	4	5	6	7	8	9	10
2. Information search process remind consumer in previous experience in decision making.	1	2	3	4	5	6	7	8	9	10
3. Information search show the standard operating procedures that make you helping decisions.	1	2	3	4	5	6	7	8	9	10
4. Information search give the relate information following your goals and objective in decision making.	1	2	3	4	5	6	7	8	9	10
5. Information search shown the alternative choose for making decision.	1	2	3	4	5	6	7	8	9	10
6. Information search explores the data in specific training and experience to make consumer in decision making.	1	2	3	4	5	6	7	8	9	10
7. Information search help you in explanation to the other in decision making.	1	2	3	4	5	6	7	8	9	10
8. Information search help you in image the possible consequence in consumer decision making.	1	2	3	4	5	6	7	8	9	10
9. Information searches the consumer in right decision making.	1	2	3	4	5	6	7	8	9	10
10. Information search is an effective for guidance in making decision.	1	2	3	4	5	6	7	8	9	10

Appendix b

Correlations

Correlations

	CDM_MEA	INV_MEA	INSE_MEA	INSO_MEA
	N	N	N	N
CDM_MEA Pearson Correlation	1	.201*	-.148	.146
N Sig. (2-tailed)		.018	.084	.088

	N	137	137	137	137
INV_MEAN	Pearson Correlation	.201*	1	-.093	.074
	Sig. (2-tailed)	.018		.277	.391
	N	137	137	137	137
INSE_MEA	Pearson Correlation	-.148	-.093	1	-.103
N	Sig. (2-tailed)	.084	.277		.233
	N	137	137	137	137
INSO_MEA	Pearson Correlation	.146	.074	-.103	1
N	Sig. (2-tailed)	.088	.391	.233	
	N	137	137	137	137

*. Correlation is significant at the 0.05 level (2-tailed).

Descriptive Statistics

	Mean	Std. Deviation	N
CDM_MEA	8.6372	.41178	137
N			
INV_MEAN	7.6979	.53389	137
INSE_MEA	8.3771	.89827	137
N			
INSO_MEA	.4854	.26563	137
N			

Correlations

		CDM_MEA	INV_MEA	INSE_MEA	INSO_MEA
		N	N	N	N
Pearson Correlation	CDM_MEA	1.000	.201	-.148	.146
	N				
	INV_MEAN	.201	1.000	-.093	.074
	INSE_MEA	-.148	-.093	1.000	-.103
	N				
Sig. (1-tailed)	CDM_MEA		.009	.042	.044
	N				
	INV_MEAN	.009		.139	.196
	INSE_MEA	.042	.139		.116
	N				
	INSO_MEA	.146	.074	-.103	1.000
	N				
	INSO_MEA	.146	.074	-.103	1.000
	N				
	INSO_MEA	.044	.196	.116	
N					

N	CDM_MEA	137	137	137	137
	N				
	INV_MEAN	137	137	137	137
	INSE_MEA	137	137	137	137
	N				
	INSO_MEA	137	137	137	137

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	INSO_MEAN , INV_MEAN, INSE_MEAN ^b		Enter

a. Dependent Variable: CDM_MEAN

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.268 ^a	.072	.051	.40116	1.346

a. Predictors: (Constant), INSO_MEAN, INV_MEAN, INSE_MEAN

b. Dependent Variable: CDM_MEAN

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.656	3	.552	3.430	.019 ^b
	Residual	21.404	133	.161		
	Total	23.060	136			

a. Dependent Variable: CDM_MEAN

b. Predictors: (Constant), INSO_MEAN, INV_MEAN, INSE_MEAN

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.926	.622		12.740	.000		
	INV_MEAN	.140	.065	.181	2.158	.033	.987	1.013

INSE_MEAN	-.055	.039	-.119	-1.410	.161	.982	1.018
INSO_MEA	.187	.130	.121	1.433	.154	.985	1.015
N							

a. Dependent Variable: CDM_MEAN

Collinearity Diagnostics^a

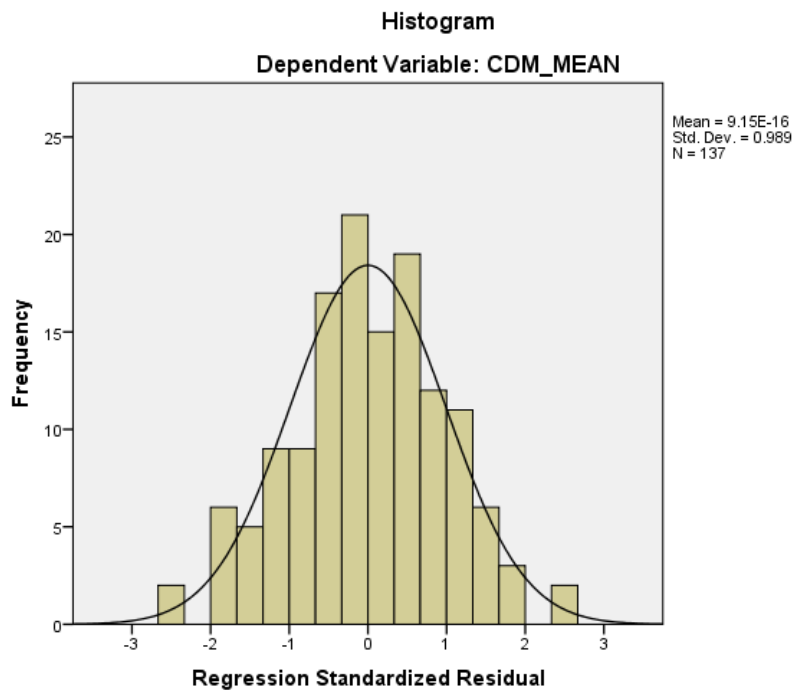
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	INV_MEA N	INSE_MEA N	INSO_MEA N
1	1	3.807	1.000	.00	.00	.00	.01
	2	.182	4.568	.00	.00	.01	.96
	3	.009	20.572	.02	.18	.75	.03
	4	.002	44.508	.98	.82	.24	.00

a. Dependent Variable: CDM_MEAN

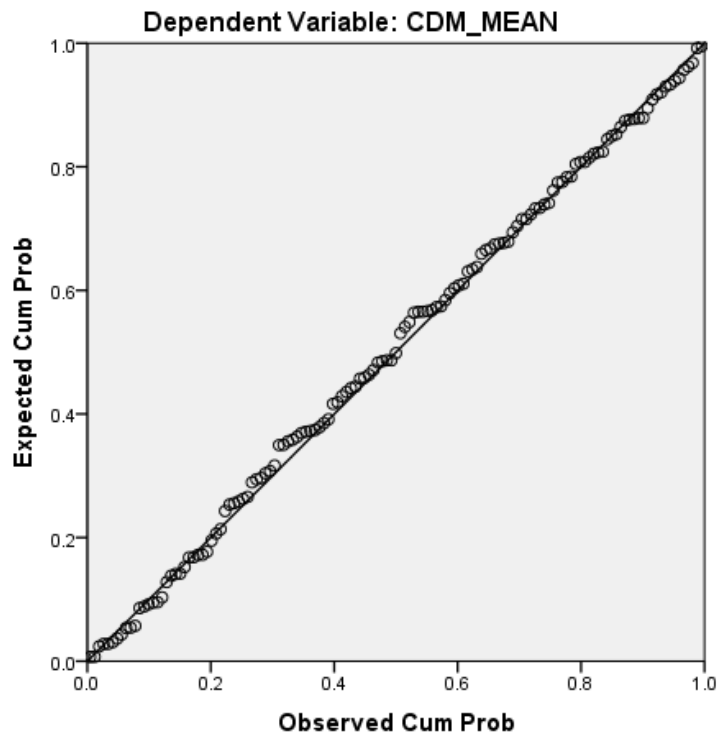
Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	8.3501	8.9259	8.6372	.11035	137
Residual	-.99015	1.03579	.00000	.39672	137
Std. Predicted Value	-2.602	2.616	.000	1.000	137
Std. Residual	-2.468	2.582	.000	.989	137

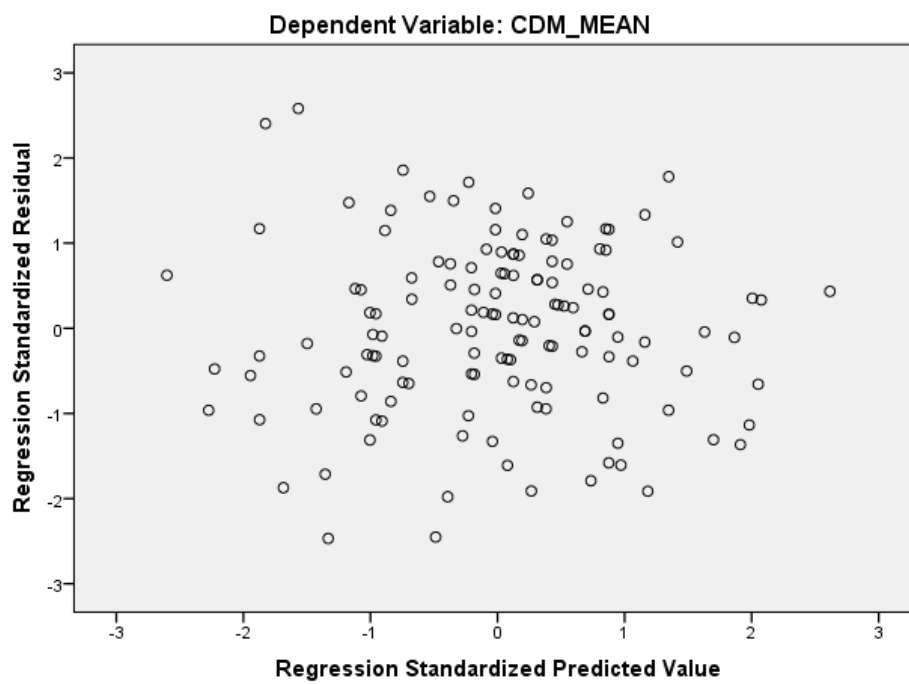
a. Dependent Variable: CDM_MEAN



Normal P-P Plot of Regression Standardized Residual



Scatterplot



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