APPENDIX A

Questionnaire Outline

| | Questionnaire No |
|---|---|
| Research Title: Dynamic Collab | porations of the Ceramic Cluster |
| Part 1: General information of company Company name | (skip to no.3 if you are not a core firm)Cluster Name |
| Address | |
| Years of business runningyear(s). Dura | ation of being a cluster memberyear(s) |
| William Communication | |
| . Which kind of ceramic product of your con | |
| () Table ware | Ratio% |
| () Hotel Accessory | Ratio% |
| () Spa Accessory | Ratio% |
| () Gift ware | Ratio% |
| () Garden ware | Ratio% |
| () Others (please specify) | % |
| 2. Which type of product manufacturing of you | our company (more than one answer is |
| accepted) | |
| () OEM: Original Equipment Manufactu | ring Ratio% |
| () ODM: Original Design Manufacturing | C |
| () OBM: Original Branding Manufacturi | |
| () Others (please specify) | |
| Part 2: Collaboration activities in the clu | ıster |
| | |

3. What is the major activities that you have done within your cluster

() Seminar and excursion domestic or international

() Meeting or exchange information/knowledge among members

| (|) | Join a ceramic fair exhibition domestic or international |
|---|---|---|
| (|) | Join R&D for new products |
| (|) | Plan and solve problem of production together |
| (|) | Grouping member for more power negotiation with supplier, buyer or government |
| (|) | Setup a company to sales products of cluster member |
| (|) | Others (please specify) |

Part 3: Characteristics of collaboration in the cluster

(Please mark $\sqrt{}$ in the box that match your answer or expectation)

4. What persons in the cluster that you collaborate and share knowledge

| Cluster Types | Person Name you collaborate and share knowledge | u collaborate and Communication/ | | | Satisfactory Level of Communication/ Collaboration | | | | Types of Communication/ Collaboration | | |
|----------------------------|---|----------------------------------|-----------------|--------|--|----|---|--------|---|-----------------|--------------------|
| 13 | (List in priorities of maximum 3 persons) | 1-2 per Month | 1-2 per week | Always | Maximum | | | Minimu | | Give consult | Receive consult |
| | | Wolltin | WCCK | | 5 | 4 | 3 | 2 | 1 | | |
| | (1) | | | # / | | | | | 7 | | |
| Core Cluster | (2) | | | | | | | | | | |
| | (3) | | | | | | | | Y / | | |
| | (1) | | maga | 600 | | | | 7 | | | |
| Suppliers | (2) | | | | R | 5 | | | | | |
| | (3) | 11 1 | JIN | | | | | | | | |
| | (1) | | | | | | | | | | |
| Government Agencies | (2) | | | | , | | 3 | |) | 2 | |
| าปล | (3) | | | 10 | | | 0 | | U | Un | HU |
| | (1) | v C | hiar | 10 | M: | ai | | n | 1/4 | arci | tv |
| Academician s/ Researchers | (2) | 7 | HICE | 6 | | | | | | | ٠, |
| Researchers | (3) | n t | S | r | 2 | S | e | | V | e e | |
| | (1) | | | | | | | | | | |
| Other Supporters | (2) | | | | | | | | | | |
| | (3) | | | | | | | | | | |

5. What types of information that you exchange within cluster and at what level?

| Types of information | Levels of information exchange | | | Willingness of information exchange | | | | | |
|---|--------------------------------|--------|-----|-------------------------------------|------|--------|-----|------|--|
| | High | Medium | Low | None | High | Medium | Low | None | |
| General company information: e.g. telephone, E-mail, product information | 12 | 126 | | | | | | | |
| Marketing information: e.g. marketing trends, exhibition events | | | | | 2 | | | | |
| Business opportunities: e.g. sources of low interest of loan, price information of raw materials and products | | | | | 18. | 31 | | | |
| Training and seminar information | | | | | | 40) | | | |
| Technical information: e.g. firing technique, energy savings technique | | 9) | | | | | | | |
| R&D information | | | | | | | | | |
| Others (please specify) | 6 | | | | | 5 | 2 | | |

6. What places and tools that you use for collaborations and information exchange?

| Types of place | Fr ex | equency of cchange/ Co | informat Ilaborati | Satisfactory level of Information exchange/ Collaboration | | | | | | |
|--------------------------------------|----------|---------------------------|-----------------------|---|------|------|-----|-----|----------|--|
| | | | | | Maxi | imum | | Min | Minimum | |
| | High | Medium | Low | None | 5 | 4 | 3 | 2 | 1 | |
| Physical places | | | | | 5 | | | | | |
| - Face to face meeting | 41 | IIN | TTV | | | | | | | |
| Virtual places | | UT | I T | | | | | | | |
| - Telephone/ Mobile | | | | | | | | | | |
| - FAX | | | | U | | | | 2 | | |
| - SMS/ Voice Message | 199 | Ma | | 318 | | ÓR | | | | |
| - E-mail | | | | | | | | | | |
| - Online discussion: e.g. MSN | Dy | LNI | ang | M | al | UI | ΊIV | er | SIT | |
| - Blogs, FAQ, and others | h ' | - 5 | r | e | S | e | r | V | <u> </u> | |
| Social places | | | | | | | | _ | | |
| - Club/ association | | | | | | | | | | |
| - Recreation: e.g. sports, Dinner | | | | | | | | | | |

Part 4: Requirements of MIS to support information/ knowledge exchange within cluster (skip if you do not involve)

(Please mark $\sqrt{ }$ in the box that match your answer or expectation)

| Τe | echi | nical | lΤ | erm | s: |
|----|------|-------|----|-----|----|
| | | | | | |

Response: The system meets individual user requirements

Time: The system response the critical information of the business cycle activities

Event: The system response the critical events of the business cycle activities

| LC, | Sponse |
|-----|---|
| ./ | What requirements that you need from the MIS |
| | () General company information: e.g. telephone, E-mail, product information |
| | () Training and seminar information |
| | () Marketing information: e.g. customer requirements, exhibition events, new markets |
| | () Raw material and energy information: e.g. clay, gas, chemical and color |
| | () Technical information: e.g. firing technique, energy savings technique, product crack |
| | minimizing, machine and equipment maintenance |
| | () Financial information: e.g. low interest rate of loan, tax information |
| | () Government support information: e.g. new and emerging technologies, academic information |
| | () R&D information |
| | () Others (please specify) |
| | |
| 12- | |

Time

8. What stages in the business process activities in cluster that you have dealt with?

| Stages | Involvement Level of involvement | | | | Month | | | |
|------------------------------------|----------------------------------|------|-----|-----------------|-------|-------------|---|--------|
| | | | Max | Maximum Minimum | | (If avail.) | | |
| C. | Yes | No | 5 | 4 | 3 | 2 | 1 | |
| Customer contact and receive order | 3 | el e | | | 1 1 3 | | | Taza I |
| New product design | | | | | | | | |
| New product development | | | | | | | | |
| Pursing of raw material | Ch | ian | | 11: | ì | | | arcity |
| Product manufacturing | | Itti | 5 | VIC | | | | cisity |
| Product distribution | 4 0 | | | | | | | |

| New product development | | | | | | | | | |
|---------------------------------|---------|----------|--------|--------|-------|------|--------|------------|-----|
| Pursing of raw material | | ian | | Ma | | | | arci | 1 |
| Product manufacturing | | ICUII | 5 | VIL | | | | | rty |
| Product distribution | 4 0 | , | | | 0 | | | , 0 | |
| 11 11811 | LS | | | E | 5 | | | / E | U |
| 9. Which raw materials that you | purchas | e and wl | nich n | nonth? | (Max | imum | purcha | ase perio | od) |
| () LPG Gas | | | Mont | h | | | | | |
| () Raw material/ Clay | | | | Montl | 1 | | | | |
| () Chemical and color | | | | Montl | 1 | | | | |
| () Others (please specify). | | | | •• | Montl | ı | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| 10. | What periods that you sell the products a | nd in what ratio? |
|------|--|----------------------------|
| | () March - June | Ratio% |
| | () July - October | Ratio% |
| | () November - February | Ratio% |
| Even | ts , 918121 | |
| 11. | What training and seminar that you attend | d and which month? |
| | () Marketing and exporting seminar | Month |
| | () Manufacturing technology seminar | Month |
| | () Energy seminar | Month |
| | () Product design seminar | Month |
| | () Others (please specify) | Month |
| 12. | What ceramic fair exhibition that you atto | end and which month? |
| | Domestic exhibition: | |
| | () BIG&BIH in Bangkok | Month |
| | () Lampang Ceramic Fair | Month |
| | () Gift & souvenir in Chiang Mai | Month |
| | () Others (please specify) | Month |
| | International exhibition: | |
| | () AMBIENTE Germany | Month |
| | () Hong Kong Fair Hong Kong | Month |
| | () Cantan Fair Kuangzhou, China | Month |
| | () Others (please specify) | Month |
| 13. | What events that you want the MIS to sup | pport? |
| | () Itinerary and details of events: e.g. | training and seminar event |
| | () Progression of business process cyc | cle activities in cluster |
| | () Information about ceramic industry | ig mai University |
| | () Information about company function | ons of the second |
| | () Others (please specify) | |

APPENDIX B

KMS Specification

B.1. Requirement Specification

User Requirement Specification for the Dynamic Knowledge Management System

RS-1 Support Knowledge Creation

RS-1.1 Provide information

(Refer to FS-1.4, FS-1.6, FS-1.8 and FS-3.1)

- Add new event on cluster calendar
- Add new event on social network calendar
- Add new news on the push/pull news system

RS-2 Support Knowledge Sharing

RS-2.1 Push/Pull news system

(Refer to FS-2.1 and FS 2.4)

- Manage web board
- Subscribe/ unsubscribe files
- RSS Feeder

RS-2.2 Collaborative calendar system

(Refer to FS-3.1)

- Display events from the calendar
- **RS-2.3** Social Network System

(Refer to FS-1.4 and FS-2.3)

Display social network members

RS-3 Support Knowledge Reuse

RS-3.1 Search opportunity

(Refer to FS-1.9, and FS-1.10)

- Display events from Calendar
- Display news

RS-4 Support Communication

(Refer to FS-3.2, FS-3.3)

- Send E-mail
- Send SMS

RS-5 Support Users' Personalization

(Refer to FS-1.1, FS-1.2 FS-1.3, FS 1.4, FS 1.5, FS-1.7 and FS-2.2)

- Customizable user information
- Customizable web design

- Customizable social network
- Customizable calendar view

B.2. Functional Specification

Functional Specification for Dynamic knowledge management system

FS-1 Response Functions

FS-1.1 Manage User

- User registration
- User login

FS-1.2 Update user profile

- User information
- Edit password
- Change personal photo

FS-1.3 Customize web design

- Background color
- Font color
- Table color

FS-1.4 Manage social network

- Invite new members to network
- Add/ delete members in network

FS-1.5 Manage links

Select/ deselect preferred links

FS-1.6 Manage web board

- Add topics to web board
- Update/ delete topics to web board

FS-1.7 Manage applications

- Display/ not display calendar activities at homepage
- Display/ not display RSS at homepage
- Display/ not display download files at homepage

FS-1.8 Manage files

- Subscribe new files
- Delete subscribed files

FS-1.9 Dynamic search

• Search keyword from web board

FS-1.10 Dynamic FAQ

View message from web board

FS-2 Time Functions

FS-2.1 Manage RSS Feed

• Select/ deselect RSS

FS-2.2 Update web page content automatically

Manage events involvements

FS-2.3 Feedback in social network

- Post messages in social network
- Delete message in social network
- Feedback to message in social network

FS-2.4 Feedback from posted web board

• Feedback to message in web board

FS-3 Events Functions

FS-3.1 Manage calendar

- Add past activities to homepage
- Add new activities in calendar
- Update/ delete activities in calendar

FS-3.2 Send e-mail

- Send email to members in social network
- Send email to members in cluster

FS-3.3 Send SMS

Send SMS

B.3. Test Specification

Test Specification for the Dynamic Knowledge Management System for Cluster

B.3.1. Functional Test Specification

1. Test Number: FT-01

2. Test Name: Functional Test

3. Test Description:

- Functional test done by core users, CDA user and supporting users.

4. Assumption:

- Attendants are expert who participated in JAD session and experts who have domain knowledge in the case study.

5. Test Case Examples:

- System capability on the dynamic functions: response, time and events

6. Feed Back:

| Issues | Proper | Fair | Poor | Comment |
|-----------------------------------|--------|------|------|----------------------------|
| FT-1 Response Functions | | | | |
| FT-1.1 Manage User | | | | |
| FT-1.2 Update user profile | - 010 | . 9 | | |
| FT-1.3 Customize web design | | 460 | | |
| FT-1.4 Manage social network | | | 9 / | |
| FT-1.5 Manage links | | | V.S | |
| FT-1.6 Manage web board | | 77 | | |
| FT-1.7 Manage applications | | | | 09111 |
| FT-1.8 Manage files | | | | |
| FT-1.9 Dynamic search | | | | S S S S S S S S S S |
| FT-1.10 Dynamic FAQ | T CU | | | |
| FT-2 Time Functions | | | | |
| FT-2.1 Manage RSS Feed | | | | |
| FT-2.2 Update web page content | | | | 300 |
| FT-2.3 Feedback in social network | 30° (M | | | 532 |
| FT-2.4 Feedback from posted web | > P | 4 | | GTO I |
| FT-3 Events Function | 1970 | | | |
| FT-3.1 Manage calendar | |) | | |
| FT-3.2 Send e-mail | | # / | | |
| FT-3.3 Send SMS | | A | 1 | |
| FT-3.4 Subscribe news | | | 0 | 5) // |

7. Questions: N/A

8. Logging System: Sound Recorder

B.3.2. Operational Test Specification

1. Test Number: OT-01

2. Test Name: Operational Test

3. Test Description:

- Operational Test done by cluster members on real environment.

4. Assumption:

Attendants are core users, CDA, experts and knowledge workers who participate in activities.

5. Test Case Examples:

New product development: the scenario of 1-to-1 relationship cluster

- Before production (Preparation, Meeting, Follow up)
- After production (Preparation, Meeting, Follow up)
- Next production (Decision, Problem solving) (Follow to the sequence diagram)

6. Feed Back:

| Issues | Proper | Fair | Poor | Comment |
|------------------------|--------|------|------|---------|
| OT-1 Before production | | | | |
| | | | | |
| OT-2 After production | 1819 | | | |
| | | 9 | | |
| OT-3 Next production | 7 1 | 7 | | |
| | | 7 | 500 | |

7. Questions: N/A

8. Logging System: Sound Recorder



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