

# Pengembangan Rinnai RT 502 +

Kompur yang menggunakan bahan bakar Gas dan ditujukan untuk para pasangan muda ( keluarga baru ) Rinnai RT 502 + diharapkan dapat menjadi alternatif kompur yang efisien dan efektif

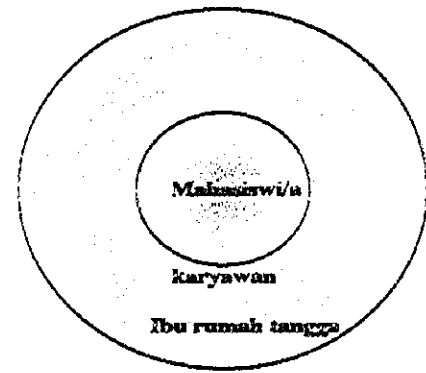
... DAYA TARIK  
...  
...  
...  
... Konsep Produk  
... BERGAYA  
... NGETREND  
... WAAHHHHHH



RT 502 + Kompur Gas yang bergaya dan trendy untuk keluarga baru



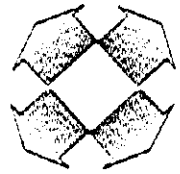
4 Elemen Dasar Rinnai RT 502 +



Gaya sebagai bagian dari hidup keluarga muda.

Efisiensi dan efektivitas produksi

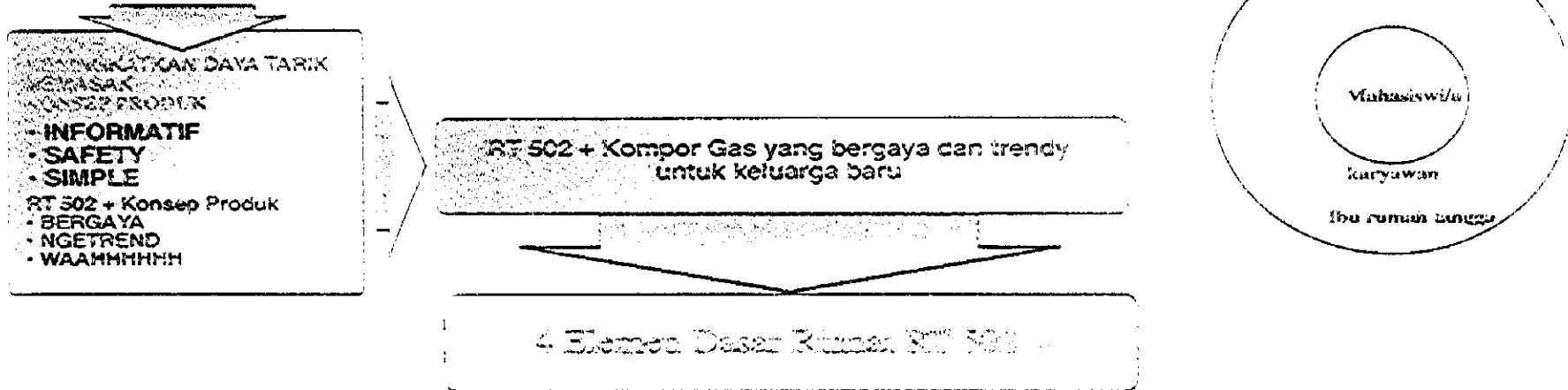
Memberikan alternatif baru dan pengembangan dari produk yang sudah ada.



Mengembangkan produk kompur gas yang dapat dijangkau oleh setiap kalangan.

# Dasar Pengembangan R i n n a i

Kompur yang menggunakan bahan bakar Gas dan ditujukan untuk para pasangan muda ( keluarga baru ) Rinnai RT 502 + diharapkan dapat menjadi alternatif kompor yang efisien dan efektif

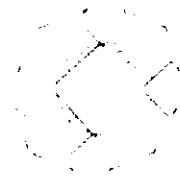


Gaya sebagai bagian dari hidup keluarga muda.

Efisiensi dan efektivitas produksi

Memberikan alternatif baru dan pengembangan dari produk yang sudah ada.

Mengembangkan produk kompor gas yang dapat dijangkau oleh setiap kalangan.



# Pangsa Pasar Rinnai 27 502 +

Gaya hidup keluarga muda tidak saja dilihat dari lingkungan tetapi telah menjangkau ke segala produk fungsionalnya

Meningkatnya jumlah keluarga muda, menyebabkan bertambahnya jumlah kebutuhan akan produk penunjang aktifitas memasak

Prosentase pembelajaan uang pada setiap konsumen untuk barang barang keperluan rumah tangga

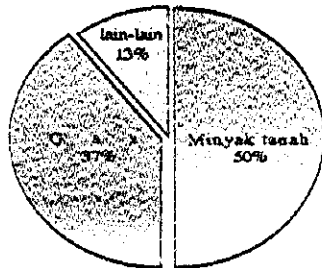
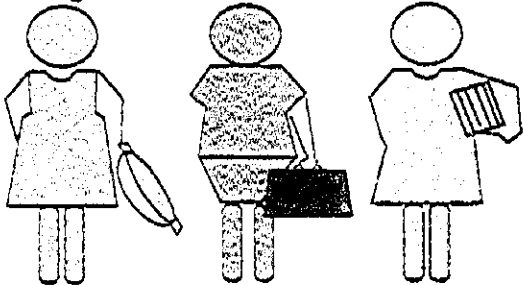
Sumber uang yang dibelanjakan dalam keluarga  
ibu rumah tangga • suami  
remaja putri • orang tua / uang pribadi  
karyawan • uang pribadi

Keinginan untuk mengekspresikan gaya hidup kepada produk yang dipergunakannya.

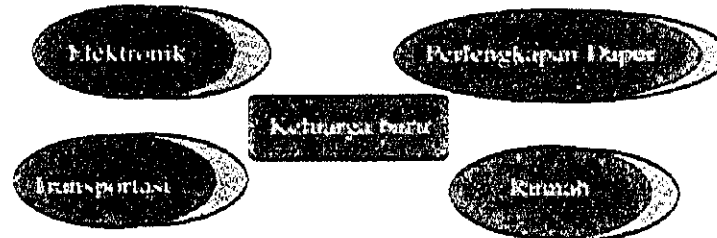
Keterbatasan dana yang dipergunakan konsumen

Tuntutan atas unsur estetik pada produk

Pangsa Pasar Peralatan memasak



KEBUTUHAN KELUARGA BARU



# Step Desain R i n n a i RT 502 +

## Karakter

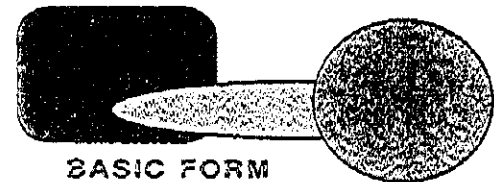
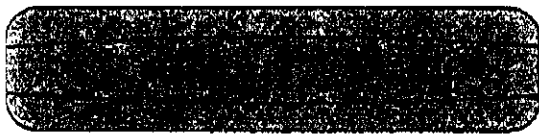
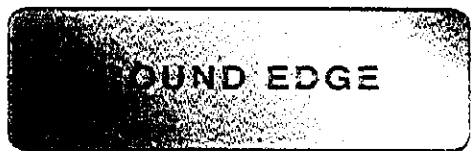
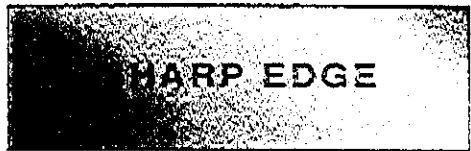
Memberikan kesan lembut ( soft ) dan bergaya ( Style ) pada komponen penunjang peralatan masak .

## Bentuk

Penggunaan dua garis kurva pada panel depan dan penyederhanaan sudut

## Warna

Alternatif warna yang menggunakan Twotone ( dua Warna ) dengan pemisahan pada bidang depan dan samping. Merah memberikan kesan Hangat dan bergairah. Abu-abu Gelap memberikan kesan yang eksklusif bagi pemakainya.



Dark Grey 97%



Vermilion Red

# Konsep Desain

## R i n n e 2 I n s p i r a t i o n

### Karakter

Memberikan kesan lembut ( soft ) dan bergaya ( Style ) pada komponen penunjang peralatan masak .

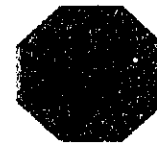
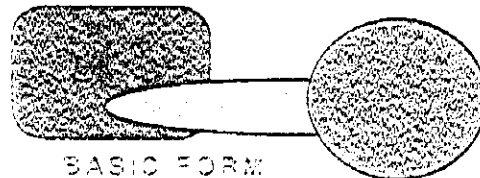
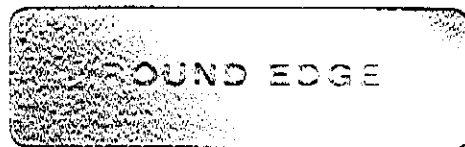
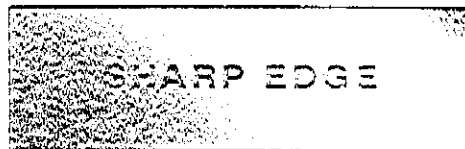
### Bentuk

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### Warna

Alternatif warna yang menggunakan Twotone ( dua Warna ) dengan pemisahan pada bidang depan dan samping. Merah memberikan kesan Hangat dan bergairah.

Abu-abu Gelap memberikan kesan yang eksklusif bagi pemakainya.

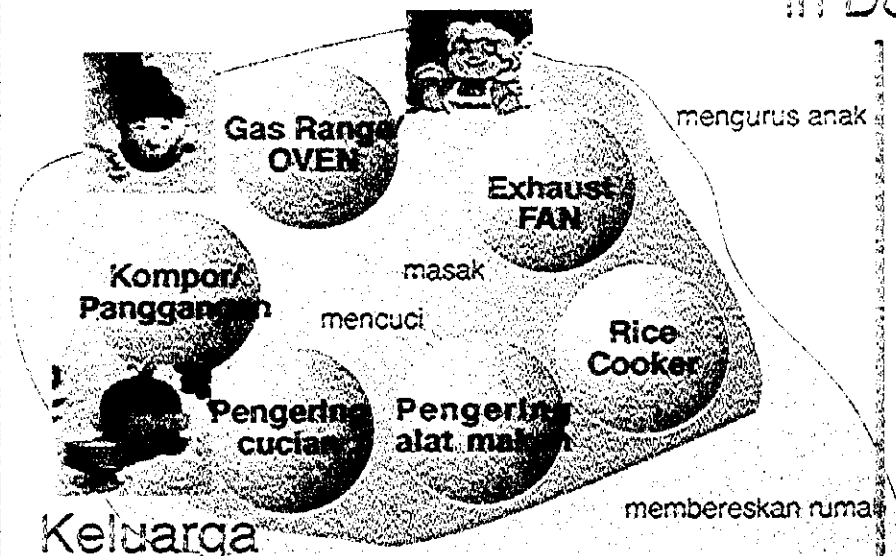


Dark Grey 97%

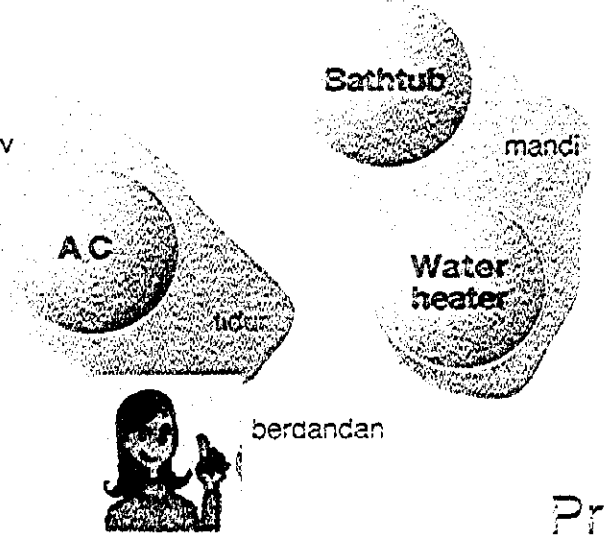


Vermilion Red

in Door

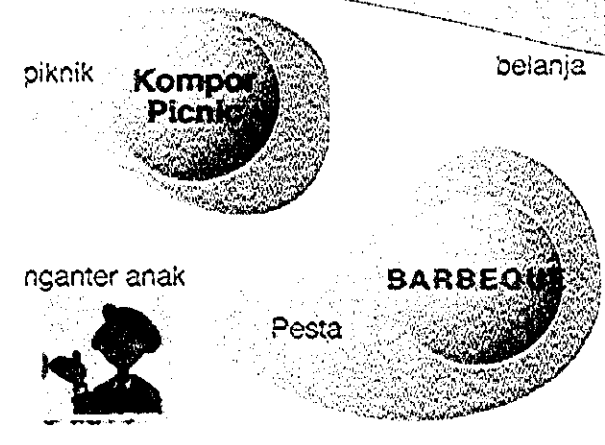


Nonton Tv



Keluarga

Pribadi



arisan

kerja

berkebun

olah raga

Out Door

Peta aktifitas ibu rumah tangga

Indoor



Gas Range  
OVEN



Exhaust  
FAN

Bathtub

mandi

Kompor/  
Panggang

masak

AC

Water  
heater

mencuci

tidur

Rice  
Cooker



Pengering  
cucian

Pengering  
alat makan

mempereskan rumah



tidur

Keluarga

picnik

Kompor  
Picnic

belanja

arisan

nganter anak



Pesta

BARBEQUE

kerja

barbecue

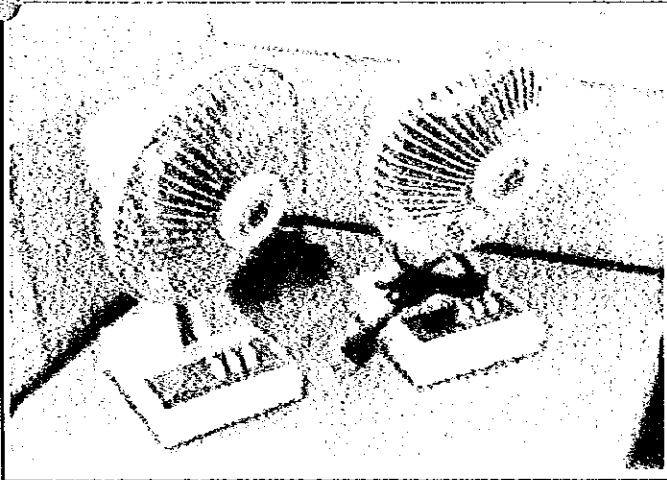
barbecue

Peta aktifitas di rumah tangga

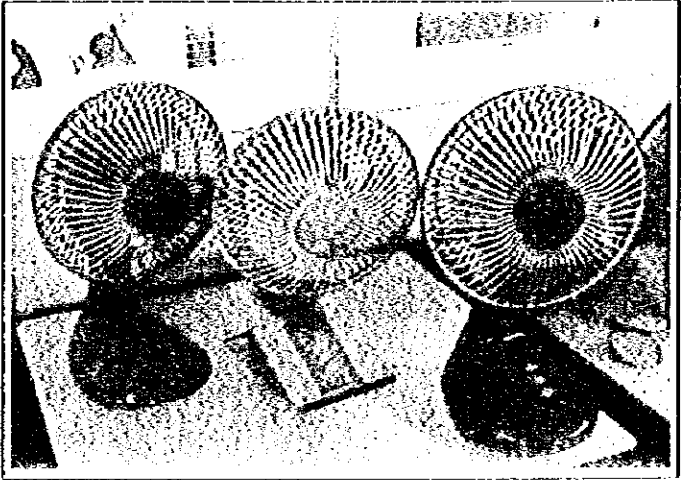
Out Door

Electric-Fan

Current Model

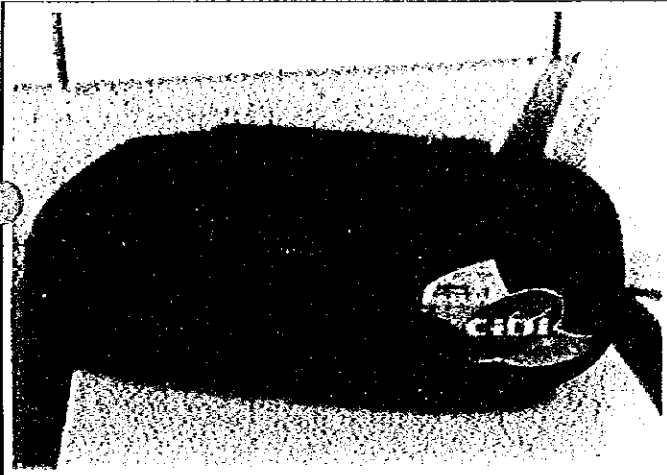


New Model

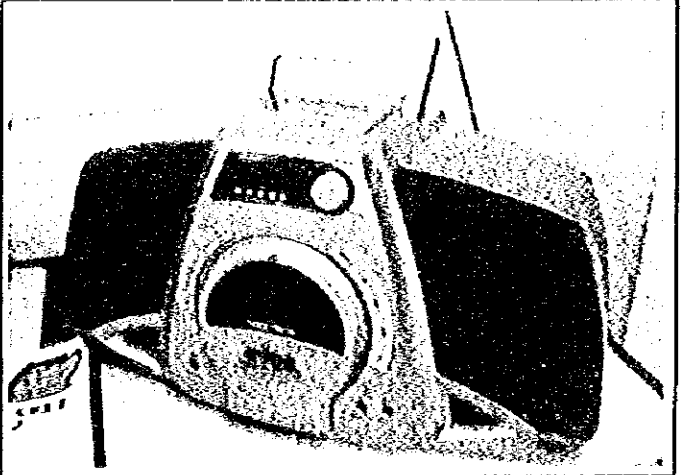


CD-Audio

Current Model

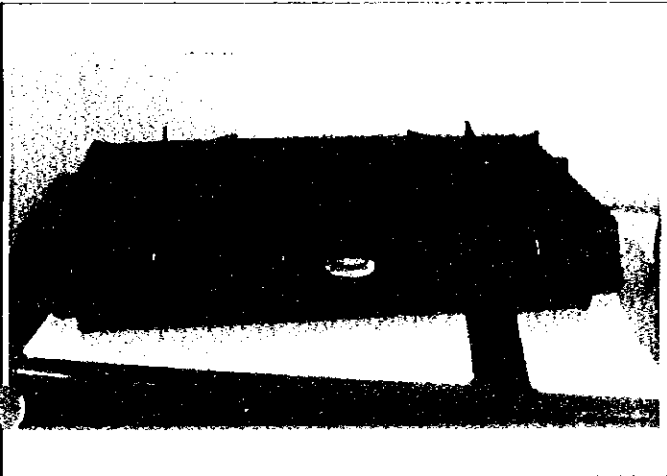


New Model

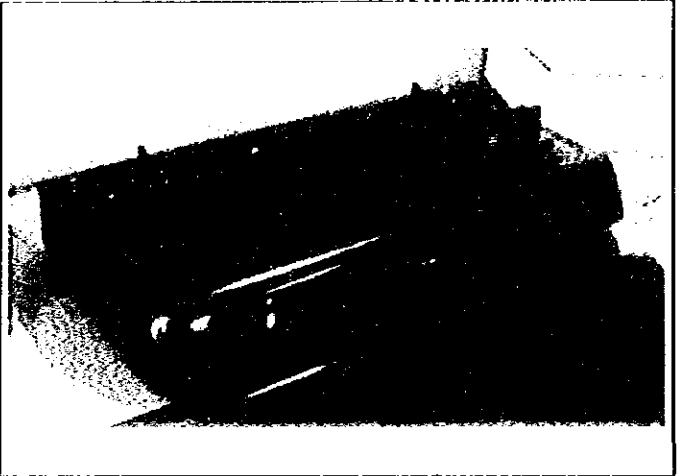


Gas-Stove

Current Model



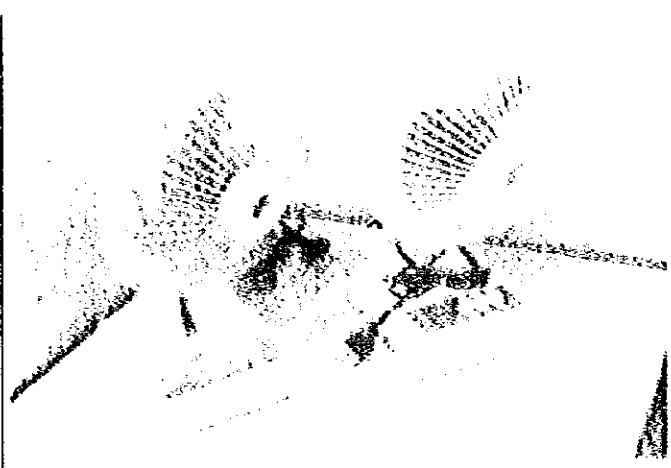
New Model



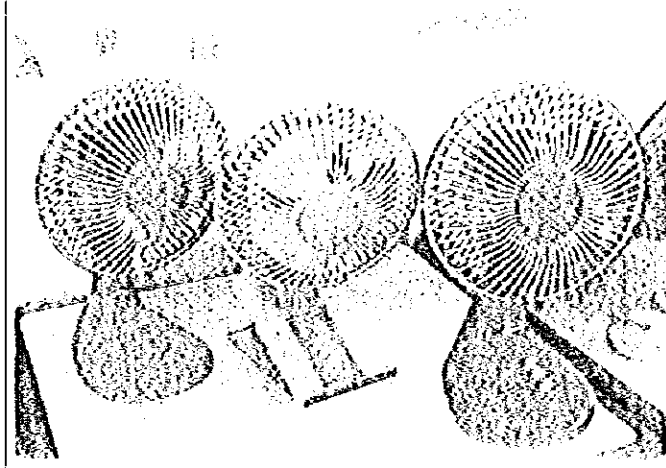


Electric-Fan

Current Model

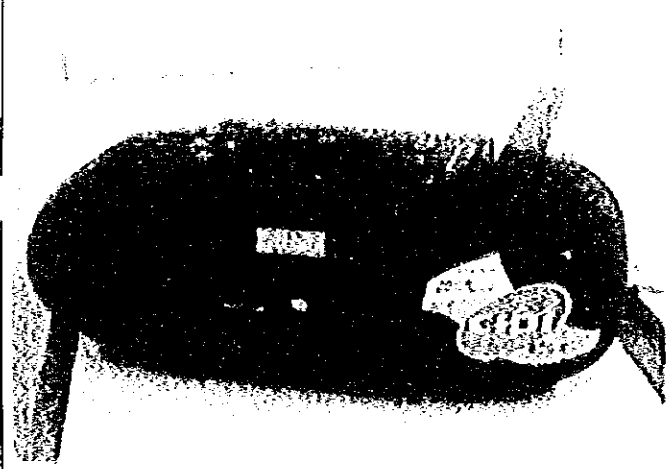


New Model

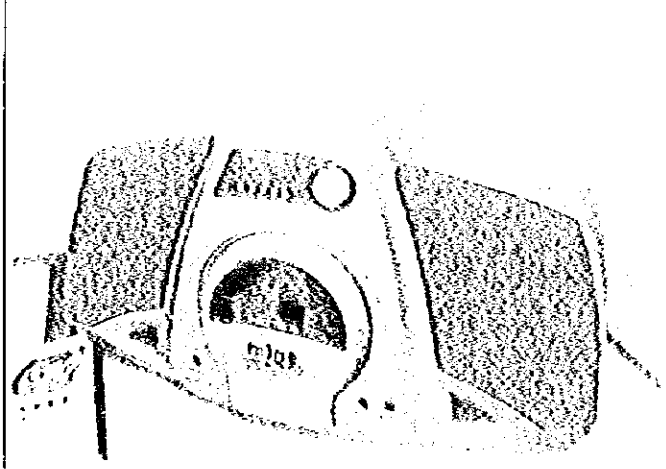


CD-Audio

Current Model

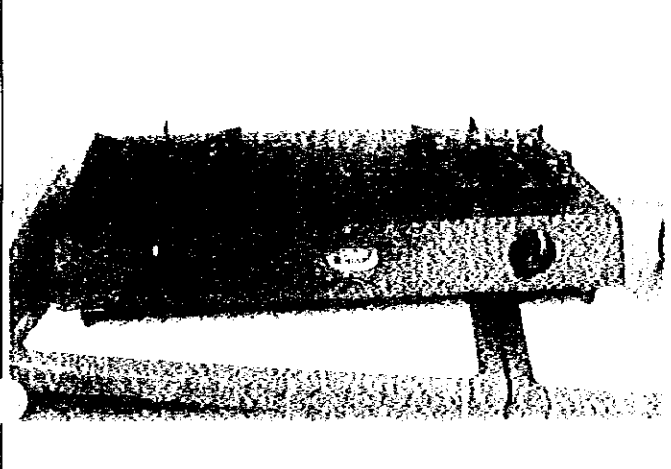


New Model

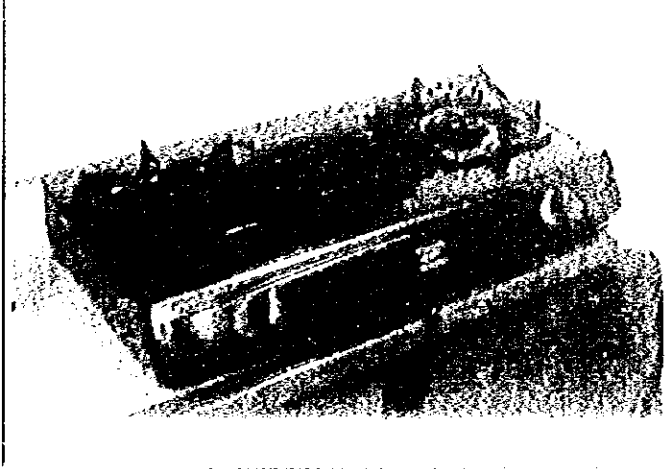


Gas-Stove

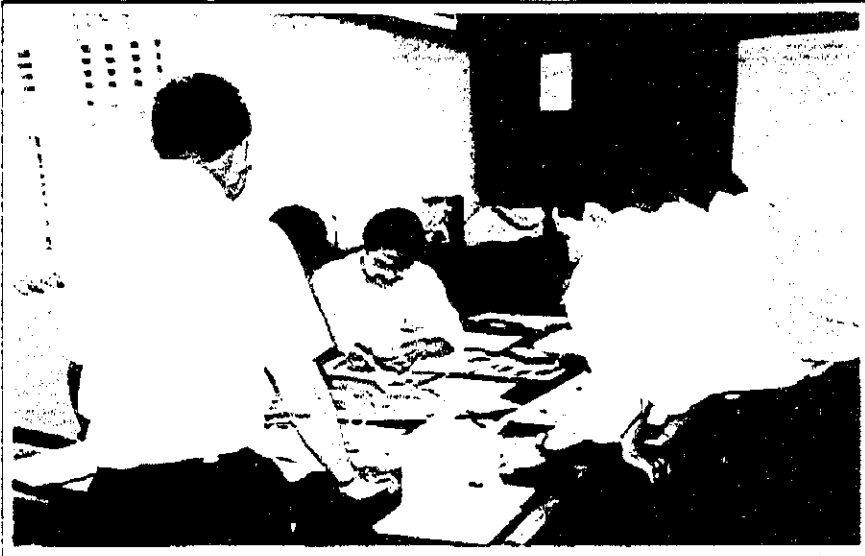
Current Model



New Model



1. Concept Making



2. Image Map Making



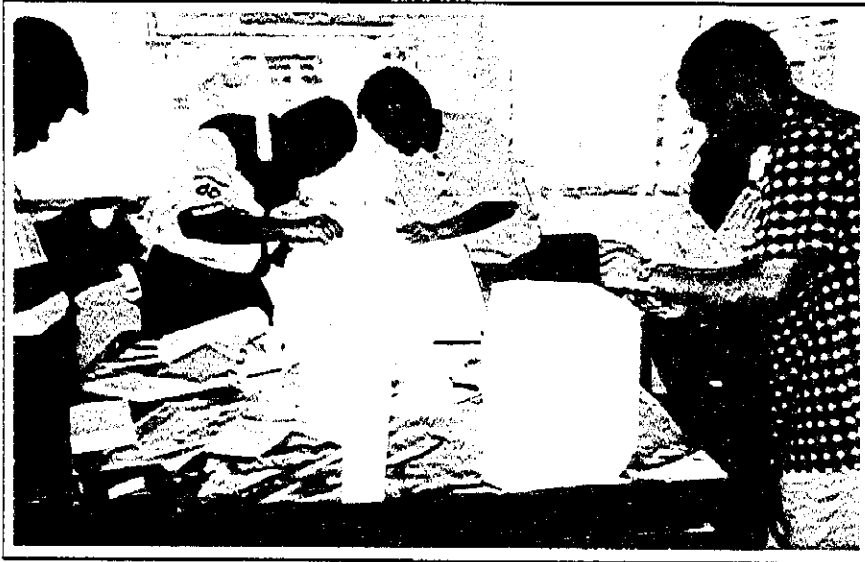
3. Idea Sketch



4. Idea Sketch



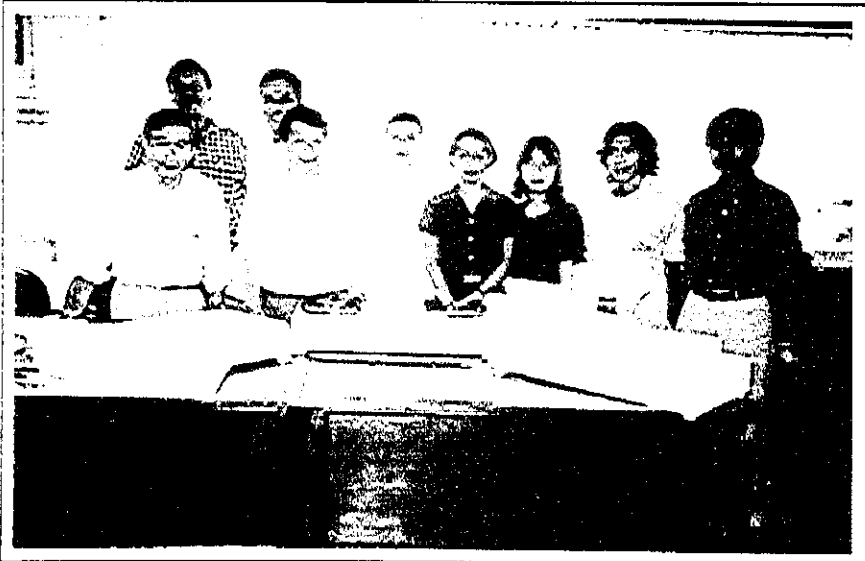
5. 3-Dimension Sketch



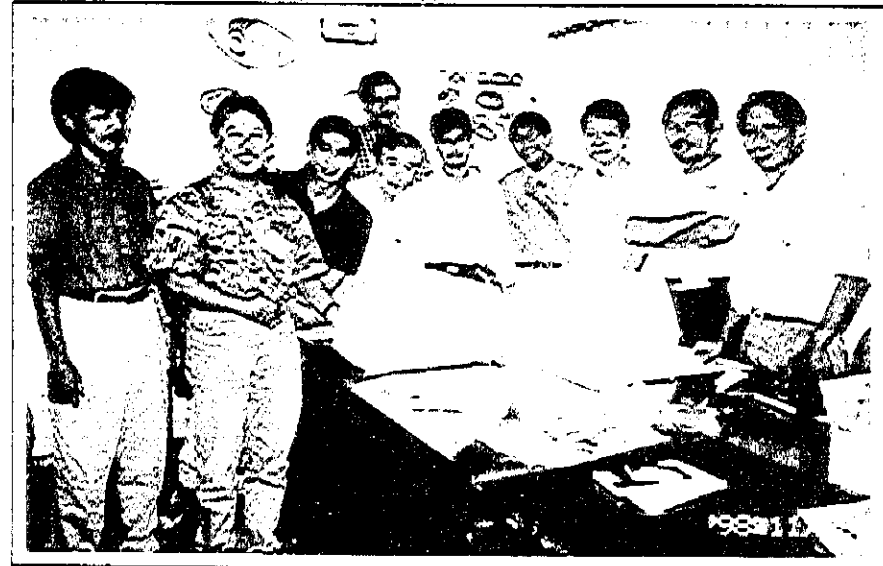
6. 3-Dimension Sketch (Fan Group)



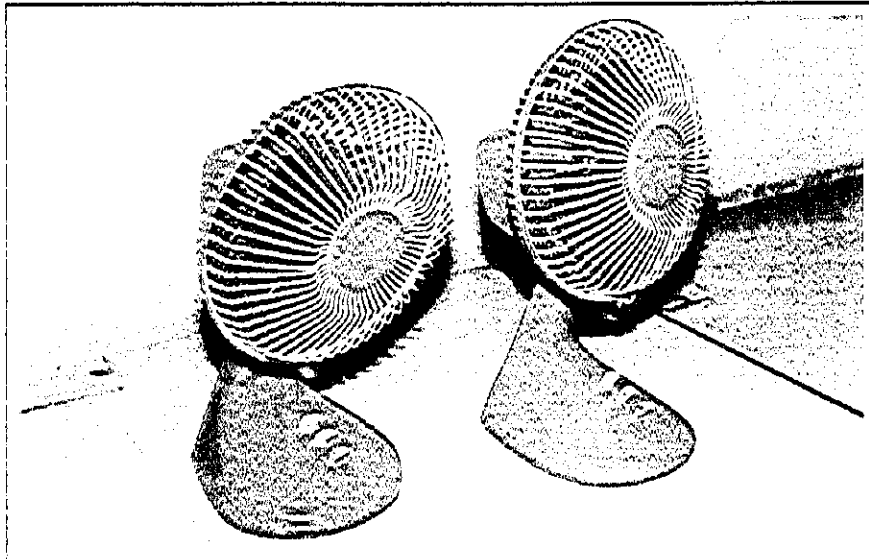
7. 3-Dimension Sketch (Gas Stove Group)



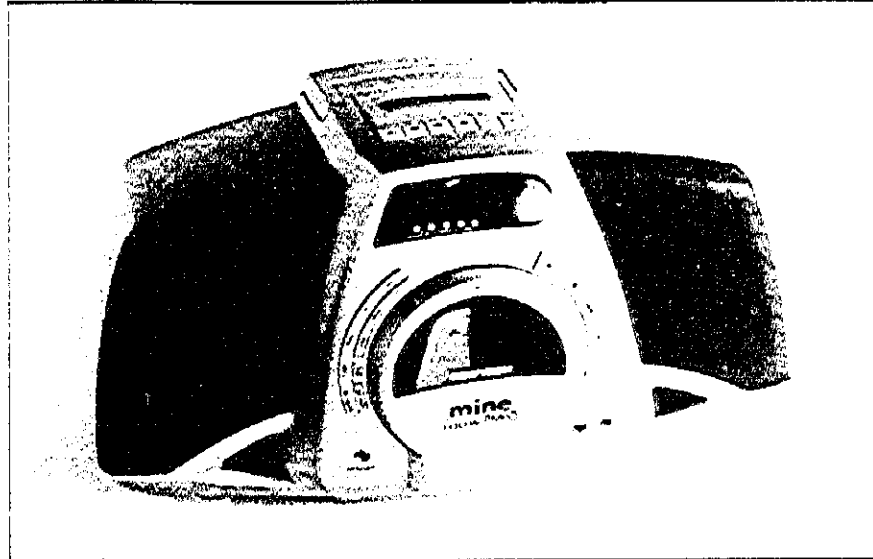
8. 3-Dimension Sketch (Audio Group)



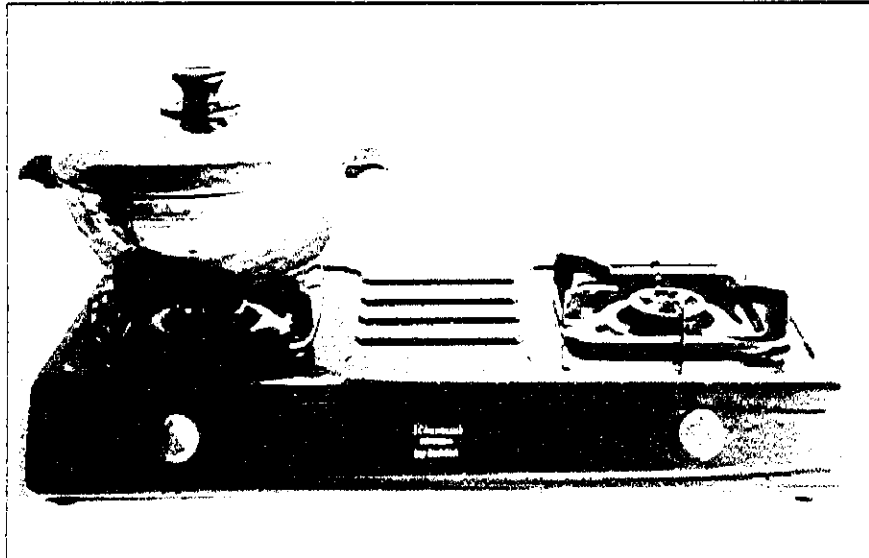
9. Mock Up (Fan Group)



10. Mock Up (Audio Group)



11. Mock Up (Gas Stove Group)



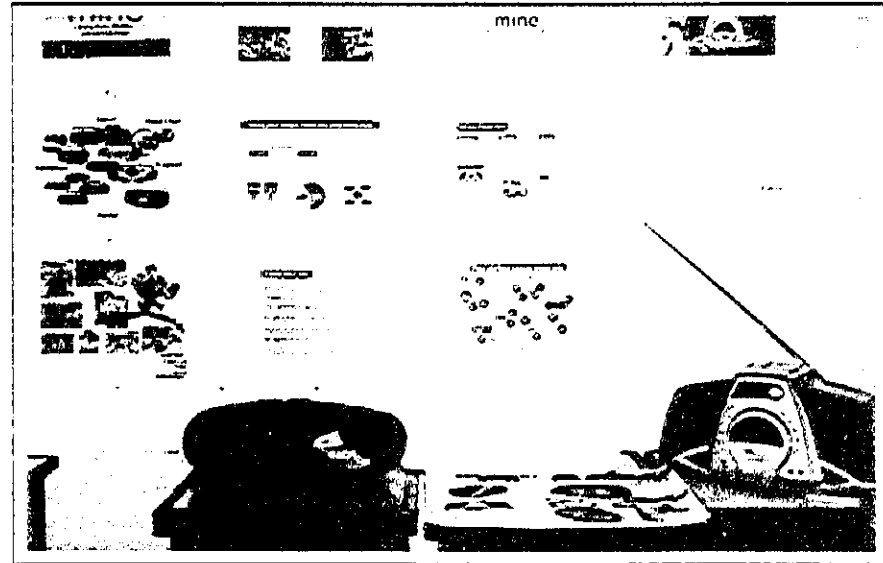
12. Idea Sketch



13. Presentation



14. Presentation



15. Closing Ceremony



16. Participants





Appendix III-7

### 3 Package Design Workshop

3-1 Pictures of workshop



## PACKAG: 10: BICN WORKSHOP



Group work after the lecture



Making pictograph of 'colors and shapes' most representing Indonesian characteristics



Digitizing pictograph after group discussion

◆ PACKAGE DESIGN WORKSHOP



Group work after the lecture



Making pictograph of "colors and shapes" most representing Indonesian characteristics



Digitizing pictograph after group discussion



## ◆ PACKAGE DESIGN-WORKSHOP



Presentation of output  
(Phase 1, coffee package)



Presentation of final output  
(Phase 2, tea package)



Audience of final  
presentation

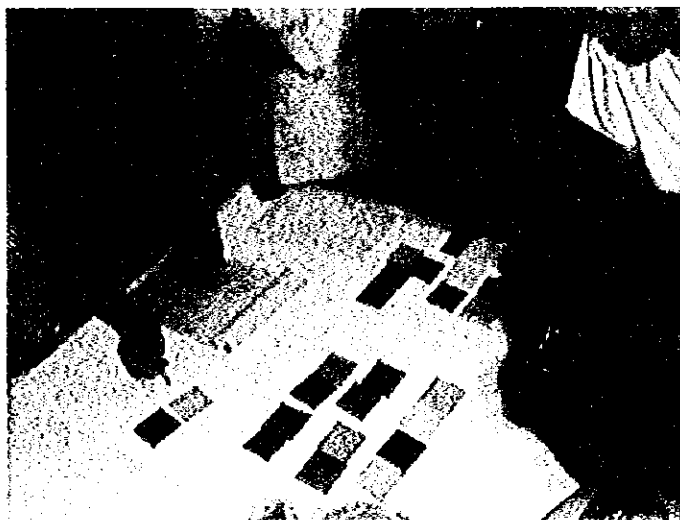
## ◆ PACKAGE DESIGN WORKSHOP



Closing Ceremony

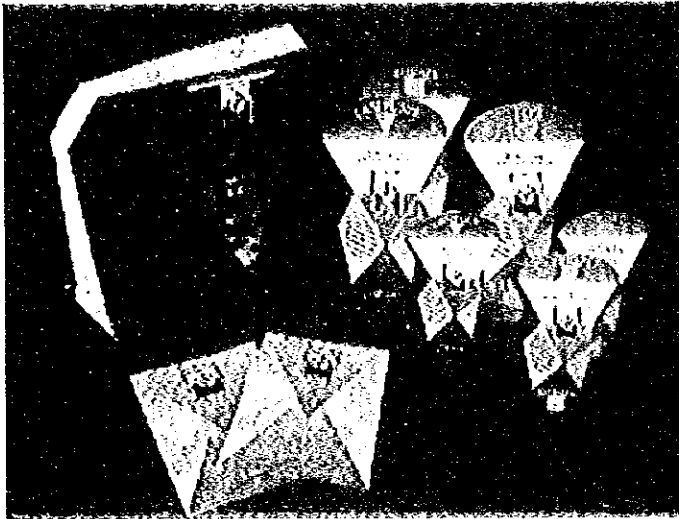


Presentation panel of  
pictograph of "colors and  
shapes"

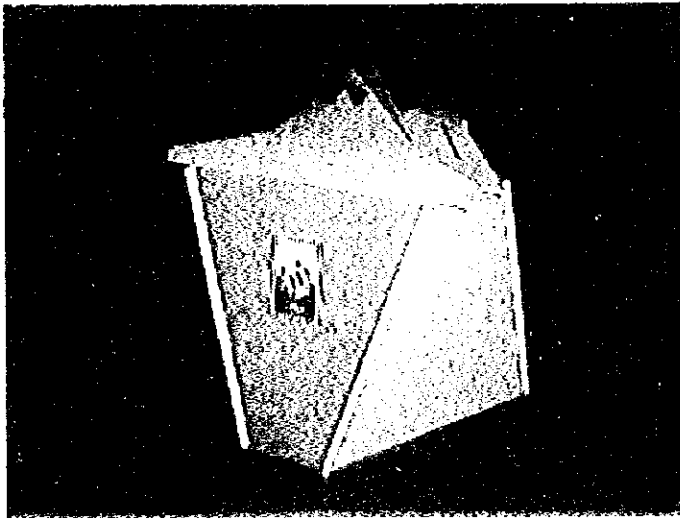


Choosing color combination  
of colors representing  
Indonesian characteristics

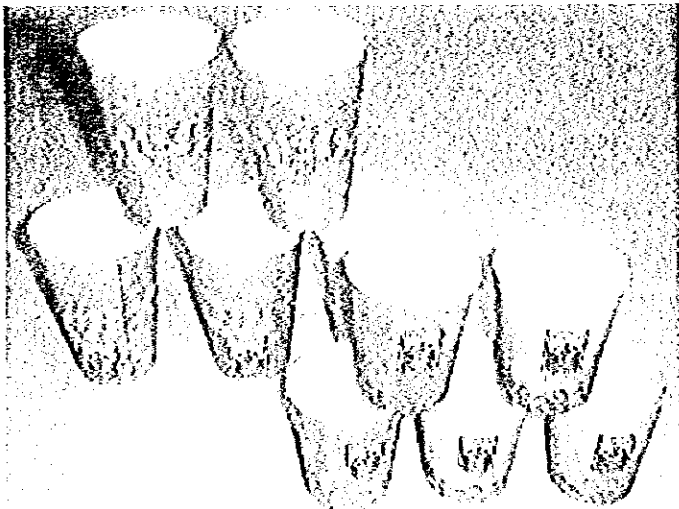
◆ PACKAGE DESIGN WORKSHOP



Comprehensives of coffee package, shopping bag and stationery (Phase 1)

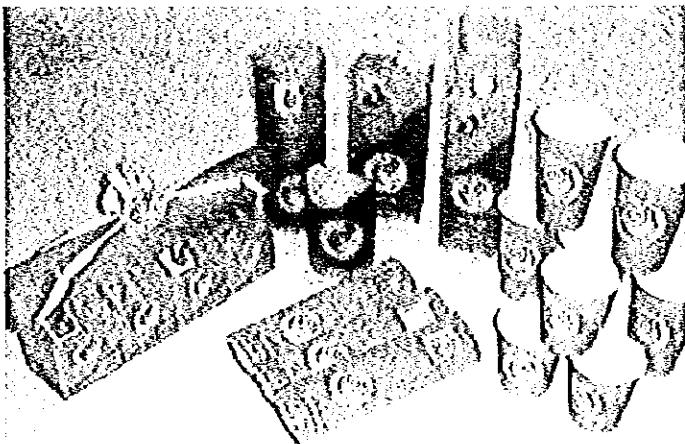


Comprehensive of coffee package for gift

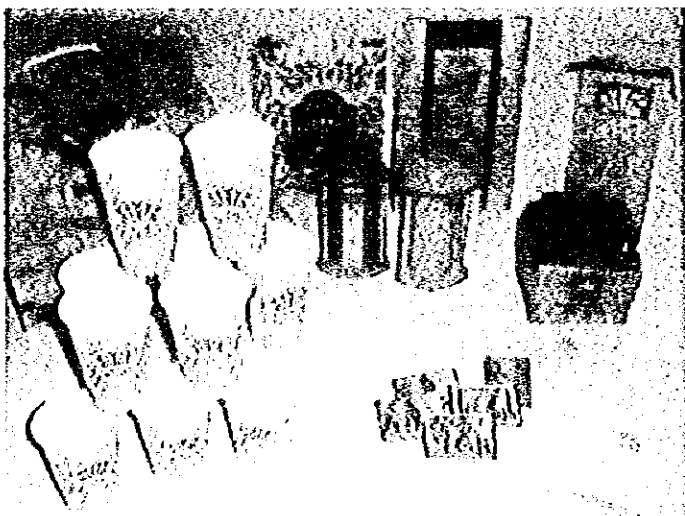


Comprehensives of paper cup

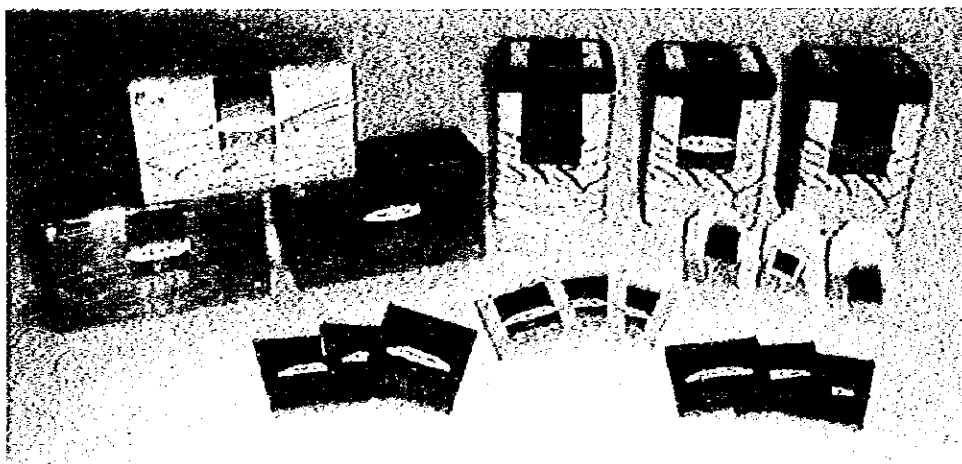
◆ PACKAGE DESIGN WORKSHOP



Comprehensives of coffee package  
(Phase 1)

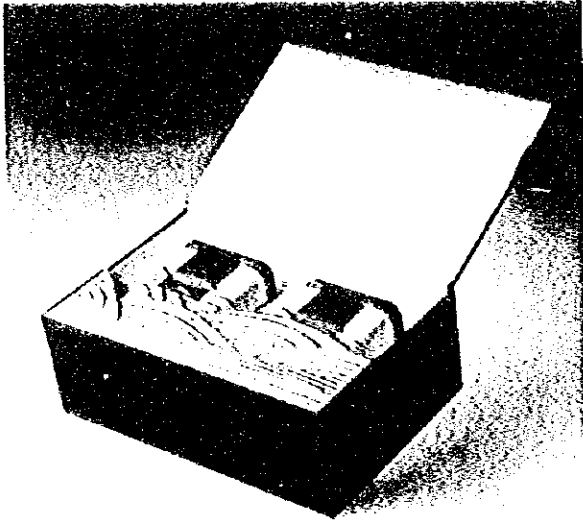


Same as above

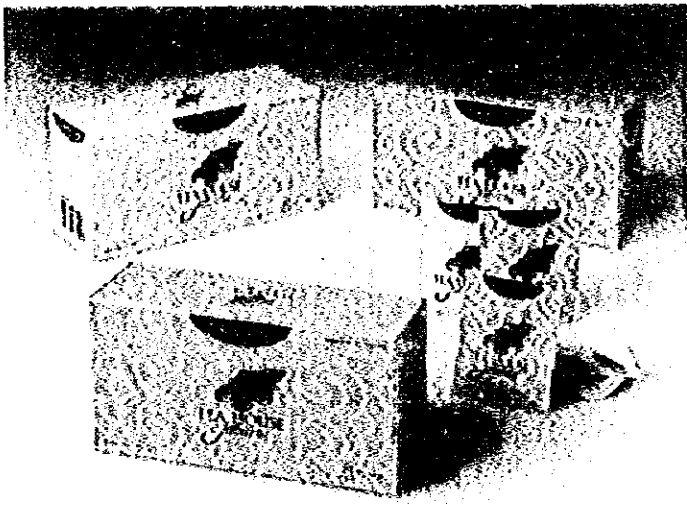


Below:  
Comprehensives of tea package for export  
(Phase 2)

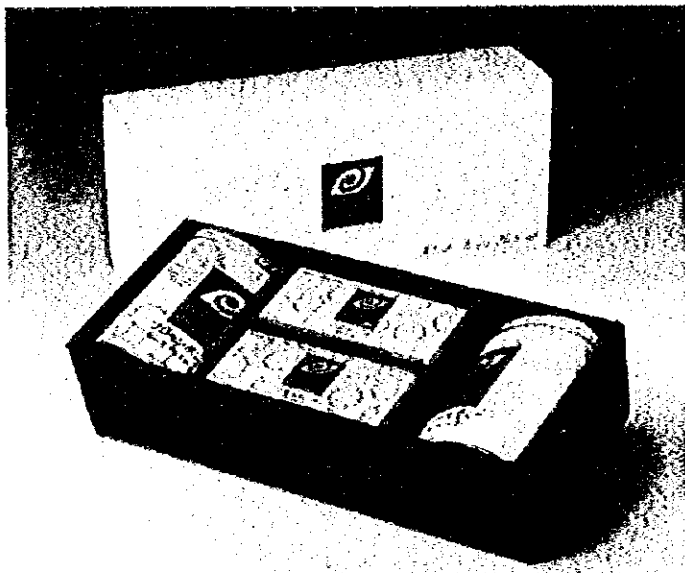
◆ PACKAGE DESIGN WORKSHOP



Comprehensive of tea package for gift

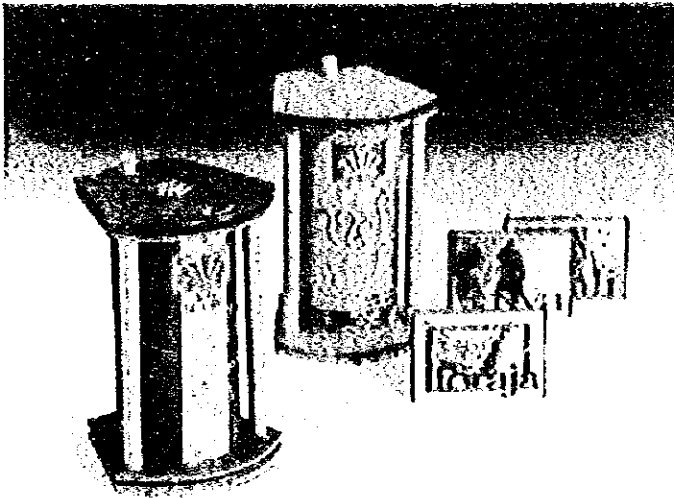


Comprehensives of tea package for export



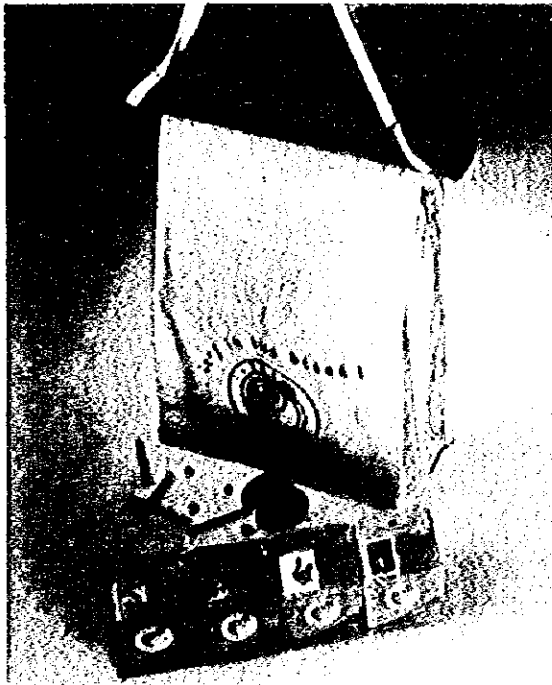
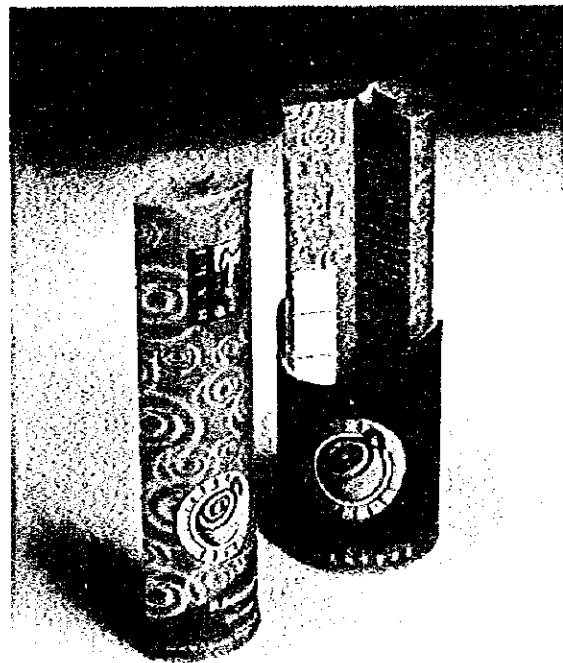
Comprehensive of assorted tea bags and loose tea package for export to Japan

◆ PACKAGE DESIGN WORKSHOP



Comprehensives of coffee package for gift

Right : Comprehensive of assorted coffee beans package



Left : Comprehensives of coffee package for gift and novelty bag

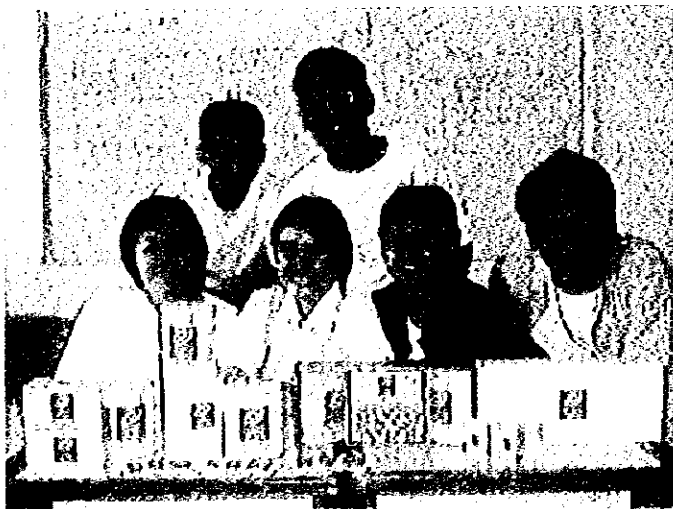
◆ PACKAGE DESIGN WORKSHOP



Comprehensives and participants of workshop (Phase 2, tea package)



Same as above



Same as above

## 8 Manufacturer Survey on Design Activities

### 8.1 General

#### (1) Utilization of design<sup>1</sup>

Among the respondent companies, a high percentage (71.5% of the total) used designers (45.3% use only in-house designers, 6.0% hire only outside designers, and 20.3% use both). A small percentage of designers hired by the respondent companies had formal education on basic and applied design techniques that are essential in creating designs that provide an additional value to products; less than 30% of designers have completed design education at universities, while the rest of the designers have "no design education (self-learned)" or "learned through OJT." A percentage of designers having design education at universities is notably low among small-sized industries (12.8% of home industries and 18.7% of small-sized industries) and craft and furniture industries<sup>2</sup>. In contrast, all designers hired by home electric appliance manufacturers have university or higher education. Geographically, there is a large gap between urban and rural areas. Designers having university or higher education are found in large cities including Jakarta and Surabaya, few of them work in rural areas (e.g., none in Jepara)

When the respondents use outside designers, 80% use "designers specified by customers" or "in-house designers of customers." The similar trend is seen among respondents who are currently using outside designers. In particular, more than 80% of smaller enterprises (home industries and small-sized industries) are using "designers specified or employed by customers."

When asked about the method for development of original design, approximately 70% of respondents cited "reference, imitation or modification of similar products," while more than 60% do not have original brands, evidencing that true produce development and design activities have still to become the industrial norm (the above figures are particularly high in the furniture industry).

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<sup>1</sup> Judging from the results of company visit survey conducting at the same period, there were quiet misunderstandings of respondents regarding "Designer" in the questionnaire survey. It seems that "Designer" understood by respondents includes design engineer, product planner and draftsman. Present situation of utilization of designer figured from company visit survey and other sources are stated in III-1 of main report.

<sup>2</sup> Employment of designer in small and micro industries is presumed to be few except a special case.



Problems facing the respondent companies vary greatly with their size, industry type and geographical area they operate. Examples are summarized as follows:

- Furniture industry: "lack of information on new design works," "technical support by laboratories or appropriate centers," and "information on design activities."
- Package/food industry: "lack of technical support by the design center" and "lack of rental equipment"
- Home electric appliance industry: "lack of technical support by the design center" and "lack of rules for protection of intellectual property rights"
- Craft industry: "lack of information on new design works," "lack of technical support by the design center," "lack of information on design activities" and "lack of collaboration with other outside institutions."

Finally, the rate of participation in design-related programs and events is very low, 10.5% on average and 4.0% among home industries. The furniture industry shows the lowest percentage (6.7), while there is no participation in most of rural cities.

## 8.2 Current State of Design Utilization

### (1) Use of designer

In the questionnaire survey<sup>3</sup>, nearly 70% (65.5%) of companies responded that they hired in-house designers. It should be noted, however, that a majority of these designers have not had formal design education and less than 30% have received special education at design institutions<sup>4</sup>.

The percentage of companies hiring designers increases with company size. There are some variations among different industries, higher in home electric appliances (75.0%)<sup>5</sup> and package and food (70.8), and low in the furniture industry (56.7). An even larger gap is seen geographically, very high in East Jakarta (95.8%) and Denpasar (85.1%) and low in Semarang (21.4%), Jepara and Central Jakarta (25.0%).

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<sup>3</sup> As responses coded "0" include "N/A," MA questions inevitably include all the "0" responses in the denominator, so that all the responses may not add up to 100%.

<sup>4</sup> Designer in the questionnaire is intended to be in this category.

<sup>5</sup> Questionnaire sheets in this survey are distributed according to the distribution of company size in manufacturing statistics. However, in case of home appliances, it was difficult to choose SMEs which produce final products, thus it caused a few response from this category and the result seems to be slanted.

**a) Use of In-house designer (N=400)**

	Number of companies	%
Yes	262	65.5%
No	138	34.5%
Total	400	100.0%

**b) Use of designer by size of Industry (N=262)**

	Number of companies	%
Home industry	39	52.0%
Small-size industry	123	63.1%
Medium-size industry	84	75.7%
Large-size industry	16	84.2%
Total	262	65.5%

Note: Company size is based on the classification made by the BPS; home industries – less than 5 full-time employees; small-sized industries – 5-20; medium-sized industries – 20-99; and large-sized industries – over 100.

**c) Use of designer by type of Industry (N=262)**

	Number of companies	%
Furniture (Wooden & Rattan)	34	56.7%
Package & Food	34	70.8%
Home electric appliance	3	75.0%
Craft	102	68.5%
Others	89	64.0%
Total	262	65.5%

**d) Use of designer by region (N=262)**

	Number of companies	%
South Jakarta	30	83.3%
East Jakarta	23	95.8%
Central Jakarta	6	25.0%
West Jakarta	14	56.0%
North Jakarta	12	75.0%
Sukabumi	5	31.3%
Bandung	22	78.6%
Cirebon	11	55.0%
Plered (Surakarta)	6	40.0%
Semarang	3	21.4%
Jepara	3	25.0%
Tegal	16	72.7%
Yogyakarta	38	84.4%
Malang	11	52.4%
Sidoarjo	12	52.2%
Surabaya	10	83.3%
Denpasar	40	85.1%
Total	262	65.5%

**(2) Number of in-house designers**

The average number of in-house designers among all the respondents is 1.6. The number of in-house designers increases roughly proportional to company size. As for the furniture industry, while the percentage of companies hiring in-house designers is relatively low, the average number of designers is highest among other industries (1.9)<sup>6</sup>.

<sup>6</sup> A draftsman is assumedly included in category of a designer.

**a) Average number of in-house designer (N=228)**

	Average number of in-house designers
Home industry	1.3
Small-size industry	1.5
Medium-size industry	1.8
Large-size industry	2.6
Total	1.6

Note: Responses that they hired designers, but giving "0" in the number of designers, were excluded from the denominator.

**b) Average number of in-house designer by type of industry (N=228)**

	Average number of in-house designers
Furniture (Wooden & Rattan)	1.9
Package & Food	1.3
Home electric appliance	1.0
Craft	1.6
Others	1.7
Total	1.6

**(3) Educational levels of designers**

Overall, designers have relatively low educational levels, particularly among smaller companies. Among designers hired by home industries with less than five employees, only 12.8% had design education at university or higher levels. There are large variations among different industries; all designers hired by home electric appliance manufacturers had design education at university or higher levels, in sharp contrast to around 20% in craft and furniture industries. Geographically, designers with the higher educational background are more seen in urban areas including East Jakarta and Surabaya.

**a) Educational level of designers by size of industry (N=262)**

	No educational background	Basic education in design (incl. OJT)	Higher education in design	Total	Number of companies
Home industry	69.2%	17.9%	12.8%	100.0%	39
Small-size industry	62.6%	18.7%	18.7%	100.0%	123
Medium-size industry	35.7%	28.6%	35.7%	100.0%	84
Large-size industry	43.8%	18.8%	37.5%	100.0%	16
Total	53.8%	21.8%	24.4%	100.0%	262

**b) Educational level of designers by type of industry (N=262)**

	No educational background	Basic education in design (incl. OJT)	Higher education in design	Total	Number of companies
Furniture (Wood & Rattan)	55.9%	20.6%	23.5%	100.0%	34
Package & Food	61.8%	8.8%	29.4%	100.0%	34
Home electric appliance	0.0%	0.0%	100.0%	100.0%	3
Craft	55.9%	26.5%	17.6%	100.0%	102
Others	49.4%	22.5%	28.1%	100.0%	89
Total	53.8%	21.8%	24.4%	100.0%	262

**c) Educational level of designers by region (N=262)**

	No educational background	Basic education in design (incl. OJT)	Higher education in design	Total	Number of companies
South Jakarta	70.0%	10.0%	20.0%	100.0%	30
East Jakarta	21.7%	0.0%	78.3%	100.0%	23
Central Jakarta	83.3%	0.0%	16.7%	100.0%	6
West Jakarta	92.9%	0.0%	7.1%	100.0%	14
North Jakarta	100.0%	0.0%	0.0%	100.0%	12
Sukabumi	60.0%	40.0%	0.0%	100.0%	5
Bandung	72.7%	13.6%	13.6%	100.0%	22
Cirebon	45.5%	45.5%	9.1%	100.0%	11
Plered (Surakarta)	83.3%	16.7%	0.0%	100.0%	6
Semarang	66.7%	0.0%	33.3%	100.0%	3
Jepara	66.7%	33.3%	0.0%	100.0%	3
Tegal	37.5%	50.0%	12.5%	100.0%	16
Yogyakarta	52.6%	31.6%	15.8%	100.0%	38
Malang	18.2%	45.5%	36.4%	100.0%	11
Sidoarjo	25.0%	66.7%	8.3%	100.0%	12
Surabaya	20.0%	0.0%	80.0%	100.0%	10
Denpasar	47.5%	22.5%	30.0%	100.0%	40
<b>Total</b>	<b>53.8%</b>	<b>21.8%</b>	<b>24.4%</b>	<b>100.0%</b>	<b>262</b>

The highest percentage of designers who graduated from design departments of universities comes from ITB (Bandung Institute of Technology), followed by ISI (Indonesia Institute of Fine Arts).

**d) Educational background of designers (N=45, MA)**

Name of institute	Number of companies	%
ITB	18	40.0%
ISI	10	22.2%
University of Wijaya Kusuma	7	15.6%
Surabaya Institute of Technology	3	6.7%
Udayana	3	6.7%
University of Merdeka	2	4.4%
Trisakti	1	2.2%
Foreign	1	2.2%
Total	45	100%

**(4) Pay system**

The highest percentage (41.6%) of respondents pays "fixed salary" to designers. Among home industries, a majority makes "percentage pay on a project basis." The pay system is generally associated with educational background of designers. Companies hiring designers graduated from universities usually pay fixed salaries, while other companies adopt the percentage pay system.

**a) Pay system of designer (N=262, MA)**

	Project basis	Monthly (fixed amount)	Special arrangement (different calculation from other employees)	Number of companies
Home industry	56.4%	20.5%	28.2%	39
Small-size industry	29.3%	45.5%	18.7%	123
Medium-size industry	28.6%	48.8%	19.0%	84
Large-size industry	25.0%	25.0%	25.0%	16
Total	32.8%	41.6%	20.6%	262

**b) Pay system of designer by type of industry (N=262, MA)**

	Project basis	Monthly (fixed amount)	Special arrangement (different calculation from other employees)	Number of companies
Furniture (Wooden & Rattan)	29.4%	38.2%	11.8%	34
Package & Food	44.1%	20.6%	29.4%	34
Home electric appliance	0.0%	66.7%	33.3%	3
Craft	42.2%	37.3%	21.6%	102
Others	20.2%	55.1%	19.1%	89
Total	32.8%	41.6%	20.6%	262

**c) Pay system of designer by educational level (N=262)**

	Project basis	Monthly (fixed amount)	Special arrangement (different calculation from other employees)	Number of companies
Basic education in design (incl. OJT)	36.4%	40.4%	21.7%	198
Higher education in design	21.9%	45.3%	17.2%	64
Total	32.8%	41.6%	20.6%	262

**(5) Recruitment system**

Approximately 70% of companies hire designers on a regular basis. Industry-wise, all the respondents in the home electric appliance industry adopt the regular employment system, while relatively high percentages of craft and package industries hire designers on an ad-hoc basis.



**a) Recruitment system by size of industry (N=262, MA)**

	Regular base	Ad-hoc base	No further recruitment is planned	Number of companies
Home industry	64.1%	10.3%	12.8%	39
Small-size industry	64.2%	10.6%	13.0%	123
Medium-size industry	75.0%	10.7%	7.1%	84
Large-size industry	56.3%	25.0%	25.0%	16
Total	67.2%	11.5%	11.8%	262

**b) Recruitment system by type of industry (N=262, MA)**

	Regular base	Ad-hoc base	No further recruitment is planned	Number of companies
Furniture (Wooden & Rattan)	70.6%	2.9%	5.9%	34
Package & Food	64.7%	8.8%	20.6%	34
Home electric appliance	100.0%	0.0%	0.0%	3
Craft	62.7%	15.7%	9.8%	102
Others	70.8%	11.2%	13.5%	89
Total	67.2%	11.5%	11.8%	262

**(6) Reason not employing designers**

This question was asked to respondents who did not have in-house designers. The most frequent response was "financial reason" followed by "no need to employ." In particular, nearly a half of craft companies cited the financial reason.

**c) Reason not employing designer (N=138, MA)**

	Not affordable	Limited opportunity	No need for designer	Number of companies
Home industry	52.8%	22.2%	38.9%	36
Small-size industry	47.2%	16.7%	31.9%	72
Medium-size industry	66.7%	14.8%	22.2%	27
Large-size industry	0.0%	33.3%	66.7%	3
Total	51.4%	18.1%	32.6%	138

Note: The population consists of companies not employing in-house designers.

**d) Reason not employing designer by type of industry (N=138, MA)**

	Not affordable	Limited opportunity	No need for designer	Number of companies
Furniture (Wooden & Rattan)	6.9%	26.9%	34.6%	26
Package & Food	35.7%	0.0%	57.1%	14
Home electric appliance	0.0%	0.0%	100.0%	1
Craft	48.9%	25.5%	23.4%	47
Others	72.0%	12.0%	32.0%	50
Total	51.4%	18.1%	32.6%	138

**e) Reason not employing designer by region (N=138, MA)**

	Not affordable	Limited opportunity	No need for designer	Number of companies
South Jakarta	50.0%	0.0%	50.0%	6
East Jakarta	0.0%	0.0%	100.0%	1
Central Jakarta	50.0%	5.6%	38.9%	18
West Jakarta	0.0%	0.0%	81.8%	11
North Jakarta	75.0%	0.0%	25.0%	4
Sukabumi	100.0%	18.2%	0.0%	11
Bandung	100.0%	16.7%	16.7%	6
Cirebon	33.3%	11.1%	22.2%	9
Plered (Surakarta)	66.7%	55.6%	0.0%	9
Semarang	100.0%	9.1%	9.1%	11
Jepara	0.0%	44.4%	55.6%	9
Tegal	83.3%	0.0%	16.7%	6
Yogyakarta	42.9%	0.0%	42.9%	7
Malang	30.0%	30.0%	30.0%	10
Sidoarjo	36.4%	45.5%	18.2%	11
Surabaya	0.0%	50.0%	50.0%	2
Denpasar	57.1%	14.3%	71.4%	7
Total	51.4%	18.1%	32.6%	138

Note: The population consists of companies not employing in-house designers.

**(7) In-house design section**

More than 60% of respondents have design sections (not necessarily those with full-time responsibility). The percentage increases with company size. By industry type, all the home electric appliance manufacturers have design sections, compared to lower percentages among package and food companies (50.0%) and furniture manufacturers (58.8%). Presence of design sections is closely associated with educational background of in-house designers; 90.6% of companies employing designers graduated from design institutes have design sections.

**a) Availability of in-house design section (N=262, SA)**

	Yes	%	Number of companies
Home industry	15	38.5%	39
Small-size industry	77	62.6%	123
Medium-size industry	63	75.0%	84
Large-size industry	14	87.5%	16
<b>Total</b>	<b>169</b>	<b>64.5%</b>	<b>262</b>

Note: The population consists of companies employing in-house designers.

**b) Availability of in-house design section by type of Industry (N=262, SA)**

	Yes	%	Number of companies
Furniture (Wooden & Rattan)	20	58.8%	34
Package & Food	17	50.0%	34
Home electric appliance	3	100.0%	3
Craft	73	71.6%	102
Others	56	62.9%	89
<b>Total</b>	<b>169</b>	<b>64.5%</b>	<b>262</b>

Note: The population consists of companies employing in-house designers.

**c) Availability of in-house design section by region (N=262, SA)**

	Yes	%	Number of companies
South Jakarta	16	53.3%	30
East Jakarta	23	100.0%	23
Central Jakarta	6	100.0%	6
West Jakarta	5	35.7%	14
North Jakarta	2	16.7%	12
Sukabumi	1	20.0%	5
Bandung	12	54.5%	22
Cirebon	5	45.5%	11
Plered (Surakarta)	5	83.3%	6
Semarang	3	100.0%	3
Jepara	1	33.3%	3
Tegal	7	43.8%	16
Yogyakarta	23	60.5%	38
Malang	9	81.8%	11
Sidoarjo	7	58.3%	12
Surabaya	9	90.0%	10
Denpasar	35	87.5%	40
<b>Total</b>	<b>169</b>	<b>64.5%</b>	<b>262</b>

Note: The population consists of companies employing in-house designers.

**d) Availability of In-house design section by educational level of designers (N=262)**

	No educational background	Basic education in design (incl. OJT)	Higher education in design	Total
No design section	50.4%	28.1%	9.4%	35.5%
Having design section	49.6%	71.9%	90.6%	64.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

As for the question to ask which department designers belong to, the highest percentage of response was "others" (42.0%), followed by "engineering department" (22.5). Of the "others" responses, "production department" accounted for the highest percentage (69%), followed by "design department" (9.9%). Note that a relatively high

percentage of designers belong to management of furniture manufacturers.

**e) Department which designers belong to (N=169, MA)**

	Management section	Marketing section	Engineering section	Others	Work independently	Number of companies
Home industry	13.3%	13.3%	20.0%	26.7%	33.3%	15
Small-size industry	22.1%	13.0%	27.3%	45.5%	15.6%	77
Medium-size industry	25.4%	17.5%	20.6%	46.0%	14.3%	63
Large-size industry	21.4%	14.3%	35.7%	21.4%	7.1%	14
<b>Total</b>	<b>22.5%</b>	<b>14.8%</b>	<b>24.9%</b>	<b>42.0%</b>	<b>16.0%</b>	<b>169</b>

**f) Other department (N=71, MA)**

	Number of companies
Production section	49 (69.0%)
Design section	7 (9.9%)
Quality control section	2 (2.8%)

**g) Department which designers belong to by size of industry (N=169, MA)**

	Management section	Marketing section	Engineering section	Others	Work independently	Number of companies
Furniture (Wooden & Rattan)	40.0%	20.0%	15.0%	40.0%	15.0%	20
Package & Food	11.8%	29.4%	0.0%	52.9%	23.5%	17
Home electric appliance	33.3%	33.3%	33.3%	66.7%	0.0%	3
Craft	15.1%	9.6%	17.8%	53.4%	17.8%	73
Others	28.6%	14.3%	44.6%	23.2%	12.5%	56
<b>Total</b>	<b>22.5%</b>	<b>14.8%</b>	<b>24.9%</b>	<b>42.0%</b>	<b>16.0%</b>	<b>169</b>

**(8) Use of outside designer**

A relatively small percentage of respondents (26.3%) uses outside designers. Also, a higher percentage of companies employing in-house designers also uses outside designers in comparison to those not employing in-house designers.

Looking at the general pattern of using designers, both in-house and outside, the most response is "using in-house designers only" (45.3%), followed by "not using in-house or outside designers" (28.5%). On the other hand, a very small percentage (6%) of companies uses "outside designers only."

Regionally, a majority of companies using in-house and outside designers is seen only in East Jakarta (62.5% of the total).

**a) Use of outside designer (N=400)**

	Hiring in-house designer(s)	Not hiring in-house designer	Total
Having relationship with outside designer(s)	30.9%	17.4%	26.3%
No relationship with outside designer	69.1%	82.6%	73.8%
	100.0%	100.0%	100.0%

**b) Use of outside designer (Summary) (N=400)**

	Hiring in-house designer(s)	Not hiring in-house designer	Total
Having relationship with outside designer(s)	20.3%	6.0%	26.3%
No relationship with outside designer	45.3%	28.5%	73.8%
	65.5%	34.5%	100.0%

**c) Use of outside designer by size of industry (Summary) (N=400, SA)**

	Neither in-house nor outside designer	Only outside designer(s)	Only in-house designer(s)	Both in-house and outside designer(s)	Total	Number of companies
Home industry	38.7%	9.3%	34.7%	17.3%	100.0%	75
Small-size industry	31.3%	5.6%	44.1%	19.0%	100.0%	195
Medium-size industry	20.7%	3.6%	50.5%	25.2%	100.0%	111
Large-size industry	5.3%	10.5%	63.2%	21.1%	100.0%	19
<b>Total</b>	<b>28.5%</b>	<b>6.0%</b>	<b>45.0%</b>	<b>20.5%</b>	<b>100.0%</b>	<b>400</b>

**d) Use of outside designer by type of industry (Summary) (N=400, SA)**

	Neither in-house nor outside designer	Only outside designer(s)	Only in-house designer(s)	Both in-house and outside designer(s)	Total	Number of companies
Furniture (Wooden & Rattan)	23.3%	20.0%	46.7%	10.0%	100.0%	60
Package & Food	22.9%	6.3%	45.8%	25.0%	100.0%	48
Home electric appliance	25.0%	0.0%	25.0%	50.0%	100.0%	4
Craft	29.5%	2.0%	45.0%	23.5%	100.0%	149
Others	31.7%	4.3%	44.6%	19.4%	100.0%	139
<b>Total</b>	<b>28.5%</b>	<b>6.0%</b>	<b>45.0%</b>	<b>20.5%</b>	<b>100.0%</b>	<b>400</b>



**e) Use of outside designer by region (Summary) (N=400, SA)**

	Neither in-house nor outside designer	Only outside designer(s)	Only in-house designer(s)	Both in-house and outside designer(s)	Total	Number of companies
South Jakarta	8.3%	8.3%	52.8%	30.6%	100.0%	36
East Jakarta	4.2%	0.0%	33.3%	62.5%	100.0%	24
Central Jakarta	75.0%	0.0%	16.7%	8.3%	100.0%	24
West Jakarta	44.0%	0.0%	56.0%	0.0%	100.0%	25
North Jakarta	25.0%	0.0%	56.3%	18.8%	100.0%	16
Sukabumi	56.3%	12.5%	25.0%	6.3%	100.0%	16
Bandung	21.4%	0.0%	53.6%	25.0%	100.0%	28
Cirebon	30.0%	15.0%	40.0%	15.0%	100.0%	20
Plered (Surakarta)	60.0%	0.0%	26.7%	13.3%	100.0%	15
Semarang	64.3%	14.3%	7.1%	14.3%	100.0%	14
Jepara	33.3%	41.7%	0.0%	25.0%	100.0%	12
Tegal	18.2%	9.1%	50.0%	22.7%	100.0%	22
Yogyakarta	15.6%	0.0%	68.9%	15.6%	100.0%	45
Malang	28.6%	19.0%	47.6%	4.8%	100.0%	21
Sidoarjo	39.1%	8.7%	39.1%	13.0%	100.0%	23
Surabaya	16.7%	0.0%	83.3%	0.0%	100.0%	12
Denpasar	12.8%	2.1%	48.9%	36.2%	100.0%	47
Total	28.5%	6.0%	45.0%	20.5%	100.0%	400

When asked about the pattern of using outside designers by dividing respondents using them into two groups, "those using outside designers only" and "those using both in-house and outside designers," more than 80% of companies in the first group responded that they used designers specified by customers and in-house designers of customers, indicating that they do not select outside designers at their discretion. On the other hand, a relatively high percentage of companies in the second group responded that they contracted with outside designers directly or via agents suggesting that they take some leadership in the design process.

**f) Manner of using outside designer**

A Out of companies contracting only with outside designer(s)	Through agency	Hiring/contracting directly	By clients' instruction/work with clients' designer(s)	By parent company's instruction/work with parent company's designer(s)	Number of companies
Home industry	14.3%	28.6%	85.7%	0.0%	7
Small-size industry	54.5%	0.0%	100.0%	9.1%	11
Medium-size industry	0.0%	50.0%	75.0%	0.0%	4
Large-size industry	50.0%	100.0%	0.0%	0.0%	2
Total	33.3%	25.0%	83.3%	4.2%	24

B Out of companies working with both in-house and outside designer(s)	Through agency	Hiring/contracting directly	By clients' instruction/work with clients' designer(s)	By parent company's instruction/work with parent company's designer(s)	Number of companies
Home industry	38.5%	53.8%	61.5%	7.7%	13
Small-size industry	35.1%	29.7%	75.7%	5.4%	37
Medium-size industry	46.4%	35.7%	67.9%	14.3%	28
Large-size industry	100.0%	100.0%	50.0%	0.0%	4
Total	43.2%	39.5%	70.4%	8.6%	82

**(9) Reason for not using outside designer**

This question was asked to two groups, "respondents not using in-house or outside designers" and "those using in-house designers only." Within the first group, the most frequently cited reason for not using outside designers was "customers/parent companies handle entire design work." (60.5%) In the second group, the most frequent response was "only in-house designers are involved in design work." (57.2%) In addition, a majority of home industries with less than five employees in the second group cited "not financially affordable."

**a) Reason for not using outside designer**

A Out of companies contracting with neither in-house nor outside designer	Only in-house designers are involved in Design	All of the design comes from client(s)	There is not any concern about design	Too expensive	Limited opportunity for contracting designers	Number of companies
Home industry	3.4%	65.5%	27.6%	24.1%	0.0%	29
Small-size industry	18.0%	62.3%	14.8%	24.6%	3.3%	61
Medium-size industry	8.7%	52.2%	13.0%	34.8%	0.0%	23
Large-size industry	0.0%	0.0%	100.0%	0.0%	0.0%	1
Total	12.3%	60.5%	18.4%	26.3%	1.8%	114

B Out of companies working only with in-house designer(s)	Only in-house designers are involved in Design	All of the design comes from client(s)	There is not any concern about design	Too expensive	Limited opportunity for contracting designers	Number of companies
Home industry	26.9%	26.9%	0.0%	50.0%	7.7%	26
Small-size industry	60.5%	37.2%	4.7%	26.7%	9.3%	86
Medium-size industry	66.1%	30.4%	10.7%	16.1%	8.9%	56
Large-size industry	58.3%	25.0%	0.0%	33.3%	0.0%	12
Total	57.2%	32.8%	5.6%	27.2%	8.3%	180

**(10) Development of original design**

Approximately 60% of all the respondents developed original designs within their companies<sup>7</sup>. The percentage increases with company size, exceeding 70% of large companies. On the other hand, the percentage of original design in all products shows different patterns. The highest percentage of home industries (68.6%) made all products originally designed, and package and food (64.3%) among industries.

<sup>7</sup> Referring to (12), most of "original design" are developed from "reference, imitation and modification of similar products", and is different from the "original design".

**a) Development of original design (N=400, MA)**

	No	Yes	Number of companies
Home industry	53.3%	46.7%	75
Small-size industry	42.6%	57.4%	195
Medium-size industry	31.5%	68.5%	111
Large-size industry	26.3%	73.7%	19
Total	40.8%	59.3%	400

**b) Percentage of original design development (N=237, MA)**

	All the products	Over 50%	Less than 50%	Number of companies
Home industry	68.6%	20.0%	28.6%	35
Small-size industry	53.6%	50.0%	10.7%	112
Medium-size industry	40.8%	51.3%	21.1%	76
Large-size industry	42.9%	21.4%	35.7%	14
Total	51.1%	44.3%	18.1%	237

**c) Percentage of original design development by type of industry (N=237, MA)**

	All the products	Over 50%	Less than 50%	Number of companies
Furniture (Wooden & Rattan)	34.4%	53.1%	34.4%	32
Package & Food	64.3%	32.1%	3.6%	28
Home electric appliance	33.3%	100.0%	0.0%	3
Craft	47.4%	55.7%	16.5%	97
Others	58.4%	28.6%	19.5%	77
Total	51.1%	44.3%	18.1%	237

**(11) Reason for not developing original design**

Nearly 70% (69.3%) of companies not engaged in development of original design cited "all designs are made by customers and parent companies" as the main reason, and the percentage increases with decrease in company size. Slightly less than 30% cited "not interested in original demand." The interest in original design increases with decrease in company size.

**a) Reason for not developing original design (N=163, MA)**

	All design comes from client(s)/parent company	No concern about the original design	Number of companies
Home industry	82.5%	20.0%	40
Small-size industry	66.3%	31.3%	83
Medium-size industry	62.9%	34.3%	35
Large-size industry	60.0%	40.0%	5
Total	69.3%	29.4%	163

**b) Reason for not developing original design by type of industry (N=163, MA)**

	All design comes from client(s)/parent company	No concern about the original design	Number of companies
Furniture (Wooden & Rattan)	82.1%	14.3%	28
Package & Food	60.0%	45.0%	20
Home electric appliance	100.0%	0.0%	1
Craft	65.4%	26.9%	52
Others	69.4%	33.9%	62
Total	69.3%	29.4%	163

**(12) Method for original design development**

This question was asked to companies who responded that they developed original design in question (10). Nearly 70% (68.8%) cited "reference, imitation and modification of similar products." This means, companies who are truly developing original design represent a small fraction of the respondents.

"Reference, imitation and modification of similar products" was cited by all of home electric appliance manufacturers, most of package and food makers (78.6%) and furniture makers (78.1%). On the other hand, the highest percentage of response "own marketing and management strategy" was seen among craft manufacturers (46.4%).

**a) Method for original design development (N=237, MA)**

	By referring/copying/improving similar products' design	Based on the instruction/specification/ request from clients/parent company	Based on own marketing/ business strategic/ designers' effort	Number of companies
Home industry	71.4%	37.1%	25.7%	35
Small-size industry	68.8%	42.0%	33.9%	112
Medium-size industry	69.7%	42.1%	42.1%	76
Large-size industry	57.1%	21.4%	28.6%	14
Total	68.8%	40.1%	35.0%	237

**b) Method for original design development by type of industry (N=237, MA)**

	By referring/copying/improving similar products' design	Based on the instruction/specification/ request from clients/parent company	Based on own marketing/ business strategic/ designers' effort	Number of companies
Furniture (Wooden & Rattan)	78.1%	59.4%	34.4%	32
Package & Food	78.6%	21.4%	10.7%	28
Home electric appliance	100.0%	66.7%	0.0%	3
Craft	69.1%	37.1%	46.4%	97
Others	59.7%	41.6%	31.2%	77
Total	68.8%	40.1%	35.0%	237

**c) Method for original design development by region (N=237, MA)**

	By referring/copying/ improving similar products' design	Based on the instruction/ specification/ request from clients/parent company	Based on own marketing/ business strategic/ designers' effort	Number of companies
South Jakarta	76.9%	23.1%	30.8%	26
East Jakarta	65.0%	20.0%	5.0%	20
Central Jakarta	40.0%	40.0%	20.0%	5
West Jakarta	87.5%	0.0%	6.3%	16
North Jakarta	71.4%	42.9%	14.3%	7
Sukabumi	80.0%	80.0%	40.0%	5
Bandung	71.4%	57.1%	33.3%	21
Cirebon	57.1%	71.4%	71.4%	7
Plered (Surakarta)	66.7%	66.7%	83.3%	6
Semarang	100.0%	50.0%	50.0%	2
Jepara	100.0%	100.0%	0.0%	1
Tegal	86.7%	80.0%	33.3%	15
Yogyakarta	68.6%	48.6%	54.3%	35
Malang	75.0%	41.7%	25.0%	12
Sidoarjo	80.0%	33.3%	20.0%	15
Surabaya	25.0%	12.5%	0.0%	8
Denpasar	52.8%	36.1%	58.3%	36
Total	68.8%	40.1%	35.0%	237

**(13) Original brand**

Companies who have their own original brands account for nearly 40% (39.5%) of all the respondents, and the highest percentage (45.0%) is seen among mid-sized companies. Among industry groups, the package and food industry showed the highest percentage (60.4%) and the furniture industry the lowest (25.0%). Among the companies who had their own original brands, 24.1% attached brand names to all the products they made.

**a) Availability of original brand (N=400, SA)**

	Yes	No	Number of companies
Home industry	29.3%	70.7%	75
Small-size industry	41.5%	58.5%	195
Medium-size industry	45.0%	55.0%	111
Large-size industry	26.3%	73.7%	19
Total	39.5%	60.5%	400

**b) Availability of original brand by type of industry (N=400, SA)**

	Yes	No	Number of companies
Furniture (Wooden & Rattan)	25.0%	75.0%	60
Package & Food	60.4%	39.6%	48
Home electric appliance	50.0%	50.0%	4
Craft	45.0%	55.0%	149
Others	32.4%	67.6%	139
Total	39.5%	60.5%	400

**c) Percentage of original brand (N=158, MA)**

	All the products	Over 50%	Less than 50%	Number of companies
Home industry	9.1%	18.2%	45.5%	22
Small-size industry	24.7%	9.9%	27.2%	81
Medium-size industry	30.0%	20.0%	16.0%	50
Large-size industry	20.0%	0.0%	20.0%	5
Total	24.1%	13.9%	25.9%	158



**d) Percentage of original brand by type of industry (N=158, MA)**

	All the products	Over 50%	Less than 50%	Number of companies
Furniture (Wooden & Rattan)	20.0%	20.0%	13.3%	15
Package & Food	20.7%	6.9%	31.0%	29
Home electric appliance	50.0%	50.0%	0.0%	2
Craft	23.9%	19.4%	31.3%	67
Others	26.7%	6.7%	20.0%	45
Total	24.1%	13.9%	25.9%	158

**(14) Reason for not having original brand**

A majority of companies who responded no original brand cited two reasons, "brand names belong to parent companies or customers" and "no interest in brand name." The result reflects the fact that many respondents primarily work as subcontractors and are not interested in own brand. On the other hand, nearly 80% (78.6%) of large companies show no interest, suggesting that the importance and a strategic value of "brand" is not widely recognized in the Indonesia business community. Among industry groups, interest is very low in the home electric appliance industry (100%) and the package and food industry (73.7%).

**a) Reason for not having original brand (N=242, MA)**

	Brand name belongs to the client(s)/parent company	No concern about the original Brand Name	Number of companies
Home industry	67.9%	56.6%	53
Small-size industry	47.4%	47.4%	114
Medium-size industry	55.7%	47.5%	61
Large-size industry	64.3%	78.6%	14
Total	55.0%	51.2%	242

**b) Reason for not having original brand by type of industry (N=242, MA)**

	Brand name belongs to the client(s)/parent company	No concern about the original Brand Name	Number of companies
Furniture (Wooden & Rattan)	48.9%	64.4%	45
Package & Food	68.4%	73.7%	19
Home electric appliance	0.0%	100.0%	2
Craft	53.7%	47.6%	82
Others	57.4%	42.6%	94
Total	55.0%	51.2%	242

**(15) Design process**

This question asked respondents to identify which stage in their design process a design proposal was delivered to the production department. While there is no significant difference according to company size, a relatively large number of large companies responded that "the production department receives detailed design" to indicate that the design proposal is delivered at the final stage of the design process. The same response was frequently seen in the furniture, home electric appliance and craft industries, whereas many companies in the package and food industry responded that "size, color and other specifications are notified to the production division which makes a sample and obtains approval," indicating that design ownership is transferred to the production department at an early stage of the design process (unless designers belong to the production department).

**a) Process of design proposal delivered to the production department (N=400, MA)**

	Detailed design drawing is made and production section follows it.	Rough design drawing is made and production section follows it.	Design plan/ idea is made and production section gets the idea from it	Only specification plan, scale and/or color, is provided and production section makes sample model(s) for approval	Others	Number of companies
Home industry	24.0%	12.0%	16.0%	20.0%	25.3%	75
Small-size industry	32.8%	16.4%	17.9%	17.9%	13.8%	195
Medium-size industry	26.1%	21.6%	20.7%	28.8%	27.9%	111
Large-size industry	36.8%	15.8%	15.8%	10.5%	15.8%	19
Total	29.5%	17.0%	18.3%	21.0%	20.0%	400

**b) Process of design proposal delivered to the production department by type of industry (N=400, MA)**

	Detailed design drawing is made and production section follows it.	Rough design drawing is made and production section follows it.	Design plan/ idea is made and production section gets the idea from it	Only specification plan, scale and/or color, is provided and production section makes sample model(s) for approval	Others	Number of companies
Furniture (Wooden & Rattan)	46.7%	21.7%	20.0%	18.3%	23.3%	60
Package & Food	2.1%	2.1%	10.4%	37.5%	35.4%	48
Home electric appliance	75.0%	50.0%	50.0%	0.0%	0.0%	4
Craft	36.2%	20.8%	18.8%	22.8%	17.4%	149
Others	23.0%	15.1%	18.7%	15.1%	16.5%	139
Total	29.5%	17.0%	18.3%	21.0%	20.0%	400

**(16) Design control**

The quality of design is primarily managed by "a function other than the designer" (66.9%), followed by "designer in collaboration with other functions" (60.8%). Other functions are mainly "top management" (66.0%) and "production department" (26.2%).

They are also frequently cited as "the function other than the designer which is solely responsible for quality management." This clearly indicates that top management is directly involved in the quality control process.

**a) Personnel taking initiative in design control (N=314, SA, MA)**

	MA		SA	
	Number	%	Number	%
Designer(s) takes full responsibility	161	51.3%	49	42.2%
Other personnels take responsibility with designers' involvement	191	60.8%	28	24.1%
Other personnels takes full responsibility	210	66.9%	19	16.4%
No one takes initiatives	23	7.3%	20	17.2%
Number of companies	314	100.0%	116	100.0%

**b) Personnel taking responsibility on design control with designers involvement (N=194, MA)**

	Number of companies	%
Top management level	126	66.0%
Management/planning section	18	9.4%
Marketing/sales/trading section	23	12.0%
Engineering section	22	11.5%
Production section	50	26.2%
Other sections	4	2.1%
Special supervisor(s)	9	4.7%
Others	30	15.7%
Total	191	100.0%

**c) Type of personnel in charge of design control alone (N=194, MA)**

	Number of companies	%
Top management level	143	68.1%
Management/planning section	19	9.0%
Marketing/sales/trading section	22	10.5%
Engineering section	22	10.5%
Production section	47	22.4%
Other sections	8	3.8%
Special supervisor(s)	10	4.8%
Others	15	7.1%
Total	210	100.0%

**(17) Design protection**

Only 6% of respondents take design protection measures. The percentage increases with company size, whereas the relatively high percentages are seen in home electric appliance (50.0%) and package (20.8%) industries. When asked about the reason for not taking design protection measures, more than 60% cited "no interest." The response that "there is no need for design protection because the parent company manages it" was cited by relatively high percentages of "craft" and "furniture" industries (around 30%).

**a) Taking any design protection measures (N=400, SA)**

	No	Yes	Total
Home industry	98.7%	1.3%	100.0%
Small-size industry	95.4%	4.6%	100.0%
Medium-size industry	90.1%	9.9%	100.0%
Large-size industry	84.2%	15.8%	100.0%
Total	94.0%	6.0%	100.0%

**b) Taking any design protection measures by type of industry (N=400, SA)**

	No	Yes	Total
Furniture (Wooden & Rattan)	98.3%	1.7%	100.0%
Package & Food	79.2%	20.8%	100.0%
Home electric appliance	50.0%	50.0%	100.0%
Craft	96.0%	4.0%	100.0%
Others	96.4%	3.6%	100.0%
Total	94.0%	6.0%	100.0%

**c) Reason for not taking design protection measures (N=376, MA)**

	No concern about design right protection	Managed by client(s)/ parent company	Managed by outside designer(s)/ agencies	Number of companies
Home industry	64.9%	29.7%	4.1%	74
Small-size industry	61.3%	25.8%	7.0%	186
Medium-size industry	58.0%	28.0%	9.0%	100
Large-size industry	68.8%	12.5%	6.3%	16
Total	61.4%	26.6%	6.9%	376

**d) Reason for not taking design protection measures by type of industry (N=376, MA)**

	No concern about design right protection	Managed by client(s)/ parent company	Managed by outside designer(s)/ agencies	Number of companies
Furniture (Wooden & Rattan)	57.6%	32.2%	3.4%	59
Package & Food	86.8%	5.3%	2.6%	38
Home electric appliance	50.0%	0.0%	0.0%	2
Craft	60.8%	25.9%	4.9%	143
Others	56.7%	31.3%	11.9%	134
	61.4%	26.6%	6.9%	376

### **(18) Problems related to design**

The most frequently cited problem was "training of designers" (58.8%), followed by "lack of funds to purchase design equipment." (55.3%) Among home industries and small-sized industries, "training of designers" showed a higher percentage than "lack of funds for equipment purchase," whereas the relationship was reversed among mid-sized and large companies.

Among industry groups, "training of designers" is the most important problem for craft and furniture companies, and the "lack of funds for equipment purchase" for home electric appliance companies. Major problems cited by the subject industries are summarized as follows (cited by at least 30% of respondents in each industry):

- Furniture industry: "lack of information on new design," "lack of technical support by the design center," and "lack of information on design-related events."
- Package/food industry: "lack of technical support by the design center" and "lack of rental equipment"
- Home electric appliance industry: "lack of technical support by the design center" and "lack of the design protection system"
- Craft industry: "lack of information on new design," "lack of technical support by the design center," "lack of information on design-related events" and "lack of collaboration with universities and other outside organizations."

**a) Problem related to design (N=400, MA)**

N=400	Home industry	Small-size industry	Medium-size industry	Large-size industry	Total
Adequate financial foundation to spare for the equipment for design	48.0%	56.9%	54.1%	73.7%	55.3%
Adequate financial foundation to spare for the recruitment designers	25.3%	20.5%	25.2%	26.3%	23.0%
Adequate financial foundation to spare for hiring outside designers	12.0%	16.9%	14.4%	10.5%	15.0%
Other financial problems	18.7%	15.4%	9.0%	21.1%	14.5%
Appropriate training for designers	58.7%	63.6%	48.6%	68.4%	58.8%
Appropriate training for employees in particular section/level	18.7%	20.0%	26.1%	15.8%	21.3%
Easier access and/or appropriate opportunities of recruitment of designers	5.3%	5.1%	7.2%	10.5%	6.0%
Technical support in laboratories or appropriate centers (e.g. design center)	22.7%	44.1%	36.0%	26.3%	37.0%
Detachment of consultants	10.7%	12.3%	14.4%	5.3%	12.3%
Collaboration with other institutions	18.7%	29.7%	18.0%	21.1%	24.0%
Rental equipment	21.3%	6.7%	6.3%	15.8%	9.8%
Information access to designers	20.0%	21.0%	12.6%	15.8%	18.3%
Information on new design works	40.0%	37.4%	45.9%	36.8%	40.3%
Information on technical support	22.7%	26.7%	18.0%	15.8%	23.0%
Information on design activities	25.3%	33.8%	26.1%	42.1%	30.5%
Information on other subjects	1.3%	5.1%	7.2%	15.8%	5.5%
Rules for protection of intellectual property rights including design rights	17.3%	22.1%	19.8%	21.1%	20.5%
Models and/or guidelines for design contract terms, range of fees	16.0%	12.8%	13.5%	10.5%	13.5%
Others	14.7%	15.4%	18.9%	21.1%	16.5%
Number of companies	75	195	111	19	400



**b) Problem related to design by type of Industry (N=400, MA)**

N=400	Furniture (Wooden & Rattan)	Package & Food	Home electric appliance	Craft	Others	Total
Adequate financial foundation to spare for the equipment for design	55.0%	47.9%	75.0%	57.0%	55.4%	55.3%
Adequate financial foundation to spare for the recruitment designers	20.0%	25.0%	0.0%	26.8%	20.1%	23.0%
Adequate financial foundation to spare for hiring outside designers	10.0%	4.2%	0.0%	22.1%	13.7%	15.0%
Other financial problems	18.3%	12.5%	0.0%	11.4%	17.3%	14.5%
Appropriate training for designers	60.0%	54.2%	25.0%	61.1%	58.3%	58.8%
Appropriate training for employees in particular section/level	13.3%	10.4%	25.0%	25.5%	23.7%	21.3%
Easier access and/or appropriate opportunities of recruitment of designers	5.0%	2.1%	0.0%	8.1%	5.8%	6.0%
Technical support in laboratories or appropriate centers (e.g. design center)	33.3%	33.3%	75.0%	44.3%	30.9%	37.0%
Detachment of consultants	15.0%	6.3%	25.0%	13.4%	11.5%	12.3%
Collaboration with other institutions	21.7%	2.1%	25.0%	30.9%	25.2%	24.0%
Rental equipment	5.0%	31.3%	0.0%	5.4%	9.4%	9.8%
Information access to designers	21.7%	10.4%	50.0%	18.8%	18.0%	18.3%
Information on new design works	48.3%	16.7%	25.0%	45.6%	39.6%	40.3%
Information on technical support	23.3%	10.4%	25.0%	24.2%	25.9%	23.0%
Information on design activities	33.3%	8.3%	25.0%	43.0%	23.7%	30.5%
Information on other subjects	1.7%	0.0%	0.0%	7.4%	7.2%	5.5%
Rules for protection of intellectual property rights including design rights	15.0%	16.7%	75.0%	23.5%	19.4%	20.5%
Models and/or guidelines for design contract terms, range of fees	15.0%	4.2%	0.0%	15.4%	14.4%	13.5%
Others	23.3%	2.1%	0.0%	26.8%	7.9%	16.5%
Number of companies	60	48	4	149	139	400

**c) Problem related to design by region (N=400, MA)**

	Jakarta	West Java	Central Java	Yogyakarta	East Java	Bali	Total
Adequate financial foundation to spare for the equipment for design	52.0%	61.3%	64.7%	66.7%	35.7%	57.4%	55.3%
Adequate financial foundation to spare for the recruitment designers	19.2%	39.8%	11.8%	20.0%	12.5%	23.4%	23.0%
Adequate financial foundation to spare for hiring outside designers	10.4%	32.3%	2.9%	11.1%	12.5%	8.5%	15.0%
Other financial problems	17.6%	15.1%	23.5%	13.3%	1.8%	14.9%	14.5%
Appropriate training for designers	58.4%	64.5%	58.8%	55.6%	60.7%	48.9%	58.8%
Appropriate training for employees in particular section/level	7.2%	28.0%	32.4%	35.6%	12.5%	34.0%	21.3%
Easier access and/or appropriate opportunities of recruitment of designers	8.8%	6.5%	0.0%	4.4%	7.1%	2.1%	6.0%
Technical support in laboratories or appropriate centers (e.g. design center)	38.4%	34.4%	47.1%	46.7%	42.9%	14.9%	37.0%
Detachment of consultants	12.0%	8.6%	0.0%	22.2%	16.1%	14.9%	12.3%
Collaboration with other institutions	7.2%	47.3%	20.6%	17.8%	25.0%	29.8%	24.0%
Rental equipment	20.0%	6.5%	0.0%	0.0%	3.6%	12.8%	9.8%
Information access to designers	12.0%	34.4%	11.8%	13.3%	17.9%	12.8%	18.3%
Information on new design works	26.4%	54.8%	58.8%	48.9%	37.5%	29.8%	40.3%
Information on technical support	10.4%	44.1%	20.6%	20.0%	25.0%	17.0%	23.0%
Information on design activities	14.4%	53.8%	20.6%	42.2%	21.4%	31.0%	30.5%
Information on other subjects	1.6%	5.4%	0.0%	13.3%	3.6%	14.9%	5.5%
Rules for protection of intellectual property rights including design rights	23.2%	36.6%	0.0%	6.7%	21.4%	8.5%	20.5%
Models and/or guidelines for design contract terms, range of fees	8.8%	25.8%	2.9%	13.3%	14.3%	8.5%	13.5%
Others	6.4%	11.8%	8.8%	26.7%	30.4%	31.9%	16.5%
Number of companies	125	93	34	45	56	47	400

### 8.3 Design Promotion

#### (1) Participation in design-related programs

Among the respondent companies, a very small percentage (10.5%) has participated in design-related events and programs. In particular, participation by smaller industries and the furniture industry fell below 10%. Geographically, companies in a limited number of regions have participated, such as Jakarta, Bandung, Tegal and Yogyakarta, compared to no participation from other regions.

#### a) Participating in any design program (N=400, SA)

	Yes	No	Total	Number of companies
Home industry	4.0%	96.0%	100.0%	75
Small-size industry	9.7%	90.3%	100.0%	195
Medium-size industry	15.3%	84.7%	100.0%	111
Large-size industry	15.8%	84.2%	100.0%	19
Total	10.5%	89.5%	100.0%	400

#### b) Participating in any design program by type of Industry (N=400, SA)

	Yes	No	Total	Number of companies
Furniture (Wooden & Rattan)	6.7%	93.3%	100.0%	60
Package & Food	12.5%	87.5%	100.0%	48
Home electric appliance	50.0%	50.0%	100.0%	4
Craft	10.1%	89.9%	100.0%	149
Others	10.8%	89.2%	100.0%	139
Total	10.5%	89.5%	100.0%	400

**c) Participating in any design program by region (N=400, SA)**

	Yes	No	Total	Number of companies
South Jakarta	0.0%	100.0%	100.0%	36
East Jakarta	62.5%	37.5%	100.0%	24
Central Jakarta	16.7%	83.3%	100.0%	24
West Jakarta	0.0%	100.0%	100.0%	25
North Jakarta	0.0%	100.0%	100.0%	16
Sukabumi	0.0%	100.0%	100.0%	16
Bandung	28.6%	71.4%	100.0%	28
Cirebon	5.0%	95.0%	100.0%	20
Plered (Surakarta)	0.0%	100.0%	100.0%	15
Semarang	0.0%	100.0%	100.0%	14
Jepara	0.0%	100.0%	100.0%	12
Tegal	22.7%	77.3%	100.0%	22
Yogyakarta	20.0%	80.0%	100.0%	45
Malang	0.0%	100.0%	100.0%	21
Sidoarjo	0.0%	100.0%	100.0%	23
Surabaya	0.0%	100.0%	100.0%	12
Denpasar	0.0%	100.0%	100.0%	47
Total	10.5%	89.5%	100.0%	400

**(2) Participation rate by type of program**

Among design-related events and programs, competitions and exhibitions showed the highest participation rate (69%), followed by seminars (54.8%). Participation in workshops was relatively poor, particularly low among companies in the home electric appliance industry (0%) and in the package and food industry (16.7%).

**a) Programs participated (N=42, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
Home industry	33.3%	0.0%	66.7%	0.0%	3
Small-size industry	52.6%	57.9%	78.9%	5.3%	19
Medium-size industry	52.9%	47.1%	70.6%	11.8%	17
Large-size industry	100.0%	33.3%	0.0%	33.3%	3
Total	54.8%	47.6%	69.0%	9.5%	42

**b) Programs participated by type of Industry (N=42, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
Furniture (Wooden & Rattan)	50.0%	75.0%	100.0%	0.0%	4
Package & Food	66.7%	16.7%	83.3%	0.0%	6
Home electric appliance	100.0%	0.0%	100.0%	0.0%	2
Craft	53.3%	60.0%	66.7%	20.0%	15
Others	46.7%	46.7%	53.3%	6.7%	15
Total	54.8%	47.6%	69.0%	9.5%	42

**c) Programs participated by region (N=42, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
South Jakarta	NA	NA	NA	NA	0
East Jakarta	66.7%	6.7%	100.0%	0.0%	15
Central Jakarta	75.0%	25.0%	25.0%	25.0%	4
West Jakarta	NA	NA	NA	NA	0
North Jakarta	NA	NA	NA	NA	0
Sukabumi	NA	NA	NA	NA	0
Bandung	50.0%	100.0%	75.0%	25.0%	8
Cirebon	0.0%	100.0%	100.0%	0.0%	1
Plered (Surakarta)	NA	NA	NA	NA	0
Semarang	NA	NA	NA	NA	0
Jepara	NA	NA	NA	NA	0
Tegal	40.0%	60.0%	20.0%	0.0%	5
Yogyakarta	44.4%	66.7%	55.6%	11.1%	9
Malang	NA	NA	NA	NA	0
Sidoarjo	NA	NA	NA	NA	0
Surabaya	NA	NA	NA	NA	0
Denpasar	NA	NA	NA	NA	0
Total	54.8%	47.6%	69.0%	9.5%	42

**(3) Reason for no participation**

Respondents who had not participated in any design-related program or event cited “lack of opportunity or information” (44.7% of the total) and “lack of financial source” (40.2%) as major reasons. They show general interest in such events but could not participate due to financial restraints or the lack of information. The percentage of respondents citing “the lack of opportunity/information” is significantly higher in rural areas, suggesting a large gap in information accessibility between urban and rural areas, particularly major metropolitan areas of Jakarta and Surabaya.

**a) Reason for no participation (N=358, MA)**

	No concern about design programs	Limited opportunity/information	No budget for design activities	Number of companies
Home industry	22.2%	38.9%	45.8%	72
Small-size industry	17.0%	43.2%	44.3%	176
Medium-size industry	12.8%	48.9%	33.0%	94
Large-size industry	18.8%	62.5%	12.5%	16
Total	17.0%	44.7%	40.2%	358

**b) Reason for no participation by type of industry (N=358, MA)**

	No concern about design programs	Limited opportunity/information	No budget for design activities	Number of companies
Furniture (Wooden & Rattan)	19.6%	55.4%	23.2%	56
Package & Food	31.0%	26.2%	50.0%	42
Home electric appliance	0.0%	50.0%	50.0%	2
Craft	10.4%	44.8%	35.1%	134
Others	18.5%	46.0%	50.0%	124
Total	17.0%	44.7%	40.2%	358

**c) Reason for no participation by region (N=358, MA)**

	No concern about design programs	Limited opportunity/ information	No budget for design activities	Number of companies
South Jakarta	2.8%	33.3%	61.1%	36
East Jakarta	0.0%	22.2%	77.8%	9
Central Jakarta	25.0%	20.0%	80.0%	20
West Jakarta	48.0%	40.0%	12.0%	25
North Jakarta	37.5%	18.8%	43.8%	16
Sukabumi	0.0%	87.5%	56.3%	16
Bandung	20.0%	80.0%	55.0%	20
Cirebon	21.1%	42.1%	52.6%	19
Plered (Surakarta)	0.0%	46.7%	0.0%	15
Semarang	35.7%	50.0%	21.4%	14
Jepara	58.3%	33.3%	0.0%	12
Tegal	11.8%	47.1%	35.3%	17
Yogyakarta	8.3%	47.2%	41.7%	36
Malang	14.3%	47.6%	23.8%	21
Sidoarjo	4.3%	56.5%	30.4%	23
Surabaya	16.7%	8.3%	83.3%	12
Denpasar	12.8%	51.1%	27.7%	47
<b>Total</b>	<b>17.0%</b>	<b>44.7%</b>	<b>40.2%</b>	<b>358</b>



**(4) Willingness to participate**

Willingness to participate in design-related programs is very high, 87.8% of all the respondents. By company size, larger companies show higher interest. In all the industries except for package and food, more than 90% of companies are willing to participate in future programs.

**a) Willingness to participate (N=400, SA)**

	Will participate in near future	Will not participate	Total	Number of companies
Home industry	81.3%	18.7%	100.0%	75
Small-size industry	87.2%	12.8%	100.0%	195
Medium-size industry	92.8%	7.2%	100.0%	111
Large-size industry	89.5%	10.5%	100.0%	19
<b>Total</b>	<b>87.8%</b>	<b>12.3%</b>	<b>100.0%</b>	<b>400</b>

**b) Willingness to participate by type of industry (N=400, SA)**

	Will participate in near future	Will not participate	Total	Number of companies
Furniture (Wooden & Rattan)	96.7%	3.3%	100.0%	60
Package & Food	77.1%	22.9%	100.0%	48
Home electric appliance	100.0%	0.0%	100.0%	4
Craft	94.0%	6.0%	100.0%	149
Others	80.6%	19.4%	100.0%	139
<b>Total</b>	<b>87.8%</b>	<b>12.3%</b>	<b>100.0%</b>	<b>400</b>

**c) Willingness to participate by region (N=400, SA)**

	Will participate in near future	Will not participate	Total	Number of companies
South Jakarta	91.7%	8.3%	100.0%	36
East Jakarta	83.3%	16.7%	100.0%	24
Central Jakarta	79.2%	20.8%	100.0%	24
West Jakarta	56.0%	44.0%	100.0%	25
North Jakarta	100.0%	0.0%	100.0%	16
Sukabumi	100.0%	0.0%	100.0%	16
Bandung	92.9%	7.1%	100.0%	28
Cirebon	100.0%	0.0%	100.0%	20
Plered (Surakarta)	100.0%	0.0%	100.0%	15
Semarang	57.1%	42.9%	100.0%	14
Jepara	91.7%	8.3%	100.0%	12
Tegal	90.9%	9.1%	100.0%	22
Yogyakarta	93.3%	6.7%	100.0%	45
Malang	100.0%	0.0%	100.0%	21
Sidoarjo	100.0%	0.0%	100.0%	23
Surabaya	83.3%	16.7%	100.0%	12
Denpasar	78.7%	21.3%	100.0%	47
Total	87.8%	12.3%	100.0%	400

**(5) Type of program interested**

The most frequently cited type of design-related program which respondents are willing to participate in is the workshop (81.2%). In particular, 88.5% of smaller industries wish to participate. This indicates that many companies want to learn design techniques through participatory and practical training, rather than seminars that are passive in nature. A majority of larger companies wish to participate in overseas competitions and exhibitions. Companies in furniture, package and craft industries show higher interest in workshop, while home electric appliance manufacturers seem to prefer local competitions and exhibitions.

**a) Type of program interested (N=351, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
Home industry	62.3%	88.5%	52.5%	18.0%	61
Small-size industry	65.3%	78.2%	53.5%	19.4%	170
Medium-size industry	49.5%	83.5%	54.4%	25.2%	103
Large-size industry	58.8%	70.6%	41.2%	58.8%	17
Total	59.8%	81.2%	53.0%	22.8%	351

**b) Type of program interested by type of industry (N=351, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
Furniture (Wooden & Rattan)	55.2%	87.9%	53.4%	24.1%	58
Package & Food	62.2%	75.7%	29.7%	0.0%	37
Home electric appliance	50.0%	25.0%	100.0%	25.0%	4
Craft	57.9%	78.6%	60.0%	35.0%	140
Others	64.3%	84.8%	50.0%	14.3%	112
Total	59.8%	81.2%	53.0%	22.8%	351

**c) Type of program interested by region (N=351, MA)**

	Design seminar	Design training program (workshop)	Domestic design competition/ exhibition	International design competition/ exhibition	Number of companies
South Jakarta	72.7%	90.9%	27.3%	18.2%	33
East Jakarta	90.0%	15.0%	90.0%	5.0%	20
Central Jakarta	57.9%	26.3%	68.4%	15.8%	19
West Jakarta	100.0%	100.0%	42.9%	0.0%	14
North Jakarta	43.8%	100.0%	43.8%	12.5%	16
Sukabumi	81.3%	100.0%	56.3%	0.0%	16
Bandung	84.6%	96.2%	80.8%	42.3%	26
Cirebon	45.0%	85.0%	65.0%	25.0%	20
Plered (Surakarta)	40.0%	100.0%	66.7%	66.7%	15
Semarang	87.5%	87.5%	37.5%	0.0%	8
Jepara	63.6%	81.8%	54.5%	45.5%	11
Tegal	70.0%	100.0%	40.0%	15.0%	20
Yogyakarta	50.0%	85.7%	61.9%	28.6%	42
Malang	38.1%	85.7%	47.6%	23.8%	21
Sidoarjo	43.5%	69.6%	8.7%	8.7%	23
Surabaya	0.0%	90.0%	0.0%	0.0%	10
Denpasar	51.4%	78.4%	67.6%	40.5%	37
Total	59.8%	81.2%	53.0%	22.8%	351

**(6) Reason for not participating in future program**

Companies who expressed no intention to participate in future design-related programs cited reasons such as “not interested” (67.3%) and “not useful” (28.6%). The percentage of companies showing no interest increases with company size. Among industries, the package and food industry showed a very high percentage (72.7%) of “not interested.”

**a) Reason for not participating in future program (N=49, MA)**

	No concern about design programs	No time for participating in the programs	No need for participating in the programs	Found to be not so useful	Number of companies
Home industry	50.0%	28.6%	14.3%	35.7%	14
Small-size industry	72.0%	16.0%	16.0%	16.0%	25
Medium-size industry	75.0%	12.5%	0.0%	37.5%	8
Large-size industry	100.0%	50.0%	0.0%	100.0%	2
Total	67.3%	20.4%	12.2%	28.6%	49

**b) Reason for not participating in future program by type of industry (N=49, MA)**

	No concern about design programs	No time for participating in the programs	No need for participating in the programs	Found to be not so useful	Number of companies
Furniture (Wooden & Rattan)	0.0%	50.0%	50.0%	100.0%	2
Package & Food	72.7%	0.0%	9.1%	9.1%	11
Home electric appliance	NA	NA	NA	NA	0
Craft	33.3%	33.3%	33.3%	22.2%	9
Others	81.5%	33.3%	3.7%	33.3%	27
Total	67.3%	20.4%	12.2%	28.6%	49

**c) Reason for not participating in future program by region (N=49, MA)**

	No concern about design programs	No time for participating in the programs	No need for participating in the programs	Found to be not so useful	Number of companies
South Jakarta	100.0%	0.0%	0.0%	66.7%	3
East Jakarta	0.0%	0.0%	25.0%	25.0%	4
Central Jakarta	80.0%	40.0%	20.0%	0.0%	5
West Jakarta	100.0%	0.0%	0.0%	0.0%	11
North Jakarta	NA	NA	NA	NA	0
Sukabumi	NA	NA	NA	NA	0
Bandung	50.0%	100.0%	0.0%	0.0%	2
Cirebon	NA	NA	NA	NA	0
Plered (Surakarta)	NA	NA	NA	NA	0
Semarang	100.0%	0.0%	0.0%	0.0%	6
Jepara	0.0%	0.0%	100.0%	0.0%	1
Tegal	50.0%	50.0%	0.0%	0.0%	2
Yogyakarta	0.0%	66.7%	33.3%	133.3%	3
Malang	NA	NA	NA	NA	0
Sidoarjo	NA	NA	NA	NA	0
Surabaya	50.0%	50.0%	0.0%	100.0%	2
Denpasar	60.0%	20.0%	20.0%	50.0%	10
Total	67.3%	20.4%	12.2%	28.6%	49

## **8.4 Outline of the Questionnaire Survey Method**

### **(1) Survey method**

The questionnaire survey was conducted by sending consultants to the surveyed enterprises and obtaining responses in the form of interview, for the following two reasons. Selection of enterprises to be visited and the actual survey were conducted by a designated local consulting firm in cooperation with district offices of the Ministry of Cooperatives, Small and Medium Enterprises.

- Mailing Survey does not generally produce a high rate of response. Furthermore, some enterprises might have suspended or closed down under the unfavorable economic condition.
- Many respondents were not expected to understand the accurate meaning of design intended by the study team (as well as other terms), and consultants were required to explain them so that questions would not be misunderstood.

### **(2) Selection of enterprises to be surveyed**

The survey covered only the subsectors identified in advance by selecting geographical areas where the selected industries were concentrated, followed by sampling of 400 companies by taking into account a sample mix by region and enterprise size (employment) for each subsector (furniture, household appliance, craft package, and restaurants, hotels and construction industry who are major markets for industrial design). As it turned out, however, actual sample distribution was significantly different from the original sample due to suspension of small enterprises, particularly in the household appliance industry.

## 8.5 Company Profile

Attributes of respondents in this questionnaire are described as follows:

### a) Type of industry (N=400, SA)

	Number of companies	%
Furniture (Wooden & Rattan)	60	15.0%
Package & Food	48	12.0%
Home electric appliance	4	1.0%
Craft	149	37.3%
Others	139	34.8%
Total	400	100.0%

Note: "Others" include service industries such as hotels, restaurants, and construction industries, etc.

### b) Size of industry (N=400, SA)

	Number of companies	%
Home industry	75	18.8%
Small-size industry	195	48.8%
Medium-size industry	111	27.8%
Large-size industry	19	4.8%
Total	400	100.0%

Note: Company size is based on the classification made by the BPS; home industries – less than 5 full-time employees; small-sized industries – 5-20; medium-sized industries – 20-99; and large-sized industries – over 100.

### c) Type and size of industry (N=400)

	Home industry	Small-size industry	Medium-size industry	Large-size industry	Total
Furniture (Wooden & Rattan)	19	26	11	4	60
Package & Food	17	19	10	2	48
Home electric appliance	0	2	2	0	4
Craft	20	78	49	2	149
Others	19	70	39	11	139
Total	75	195	111	19	400



**d) Year of establishment (N=187)**

	Number of companies
1951-	1
1956-	2
1961-	4
1966-	5
1971-	9
1976-	19
1981-	33
1986-	50
1991-	49
1996-	15
Total	187

**e) Number of respondent by region (N=400)**

	Number of companies
South Jakarta	36
East Jakarta	24
Central Jakarta	24
West Jakarta	25
North Jakarta	16
Sukabumi	16
Bandung	28
Cirebon	20
Plered (Surakarta)	15
Semarang	14
Jepara	12
Tegal	22
Yogyakarta	45
Malang	21
Sidoarjo	23
Surabaya	12
Denpasar	47
Total	400

**f) Number of respondent and size of Industry (N=400)**

	Home industry	Small-size industry	Medium-size industry	Large-size industry	Total
South Jakarta	19	7	8	2	36
East Jakarta	2	13	9	0	24
Central Jakarta	4	15	2	3	24
West Jakarta	1	20	2	2	25
North Jakarta	4	11	1	0	16
Sukabumi	1	12	3	0	16
Bandung	8	15	5	0	28
Cirebon	3	11	6	0	20
Plered (Surakarta)	0	7	8	0	15
Scmarang	6	6	2	0	14
Jepara	9	3	0	0	12
Tegal	3	11	8	0	22
Yogyakarta	9	16	18	2	45
Malang	1	10	8	2	21
Sidoarjo	1	14	6	2	23
Surabaya	1	6	5	0	12
Denpasar	3	18	20	6	47
<b>Total</b>	<b>75</b>	<b>195</b>	<b>111</b>	<b>19</b>	<b>400</b>

**g) Type of Industry by region (N=400)**

	Furniture (Wooden & Rattan)	Package & Food	Home electric appliance	Craft	Others	Total
South Jakarta	1	23	0	6	6	36
East Jakarta	2	8	4	5	5	24
Central Jakarta	0	2	0	10	12	24
West Jakarta	1	9	0	9	6	25
North Jakarta	0	3	0	3	10	16
Sukabumi	1	0	0	0	15	16
Bandung	6	0	0	17	5	28
Cirebon	9	1	0	6	4	20
Plered (Surakarta)	0	0	0	15	0	15
Semarang	0	0	0	0	14	14
Jepara	12	0	0	0	0	12
Tegal	0	0	0	1	21	22
Yogyakarta	19	2	0	21	3	45
Malang	6	0	0	15	0	21
Sidoarjo	3	0	0	20	0	23
Surabaya					12	12
Denpasar				21	26	47
<b>Total</b>	<b>60</b>	<b>48</b>	<b>4</b>	<b>149</b>	<b>139</b>	<b>400</b>

**h) Annual sales and productivity (N=187)**

	Annual sales (97)	Annual sales per employee (97)	Annual sales per full-time employee (97)
Home industry	212,018,519	35,774,092	98,929,012
Small-size industry	394,976,354	24,736,227	40,791,303
Medium-size industry	529,044,253	9,812,819	16,191,554
Large-size industry	93,275,000,000	321,067,247	354,044,872
<b>Total</b>	<b>2,560,553,218</b>	<b>29,542,718</b>	<b>50,909,579</b>

Note: "Annual sales per employee (97)" was obtained dividing total sales value by number of employee. "Annual sales per full-time employee (97)" was obtained dividing total sales value by number of full-time employee excluding part-time employee.

**i) Productivity by region (N=187)**

	Annual sales per employee (97)
South Jakarta	NA
East Jakarta	11,079,143
Central Jakarta	237,340,655
West Jakarta	45,305,084
North Jakarta	NA
Sukabumi	10,865,123
Bandung	17,060,132
Cirebon	20,402,603
Plered (Surakarta)	NA
Semarang	NA
Jepara	NA
Tegal	15,012,068
Yogyakarta	9,248,713
Malang	NA
Sidoarjo	NA
Surabaya	NA
Denpasar	NA

**j) Trend of annual sales<sup>9</sup> by type of industry (N=187)**

	95	96	97	98 (estimate)
Furniture (Wooden & Rattan)	266,183,963	322,034,444	355,164,184	388,806,897
Package & Food	550,750,000	591,312,500	664,352,941	590,795,455
Home electric appliance	310,150,000	376,593,813	449,000,000	371,375,000
Craft	287,298,958	325,694,798	380,979,453	416,066,672
Others	7,593,626,163	5,402,592,098	5,993,874,348	12,171,850,243

Note: \*) Nominal sales

**k) Capital (N=187)**

Amount of capital	%	Number of companies
0	0.5%	1
-1,000,000	0.5%	1
-10,000,000	4.3%	8
-50,000,000	23.5%	44
-100,000,000	19.8%	37
-200,000,000	20.9%	39
-300,000,000	11.2%	21
-500,000,000	8.0%	15
-1,000,000,000	6.4%	12
-10,000,000,000	2.7%	5
>10,000,000,000	2.1%	4
Total	100.0%	187

**l) Average capital by type of industry (N=187)**

	Amount of capital	Number of companies
Furniture (Wooden & Rattan)	139,777,845	29
Package & Food	250,181,818	22
Home electric appliance	444,062,500	4
Craft	131,765,425	62
Others	9,735,352,884	70

**m) Market by type of industry (N=172)**

	For export	For domestic market	Others *)
Furniture (Wooden & Rattan)	30.2%	66.3%	3.5%
Package & Food	11.8%	81.8%	6.4%
Home electric appliance	10.0%	82.5%	7.5%
Craft	34.0%	60.8%	5.2%
Others	6.5%	89.6%	3.9%

Note: \*) Others = (export + domestic)

**n) Proportion of OEM/Sub-contracted manufacturing (N=355)**

	OEM/Sub-contracted manufacturing	Own brand products	Others
Furniture (Wooden & Rattan)	34.8%	48.0%	17.2%
Package & Food	9.8%	82.8%	7.4%
Home electric appliance	23.3%	73.3%	3.3%
Craft	16.0%	61.3%	22.7%
Others	10.9%	55.7%	33.4%

**o) Proportion of OEM/Sub-contracted manufacturing by region (N=355)**

	OEM/Sub-contracted manufacturing	Own brand products	Others
South Jakarta	3.7%	90.4%	5.9%
East Jakarta	16.5%	75.0%	8.5%
Central Jakarta	0.0%	28.6%	71.4%
West Jakarta	0.0%	100.0%	0.0%
North Jakarta	0.0%	90.0%	10.0%
Sukabumi	6.3%	78.1%	15.6%
Bandung	14.5%	39.1%	46.4%
Cirebon	21.4%	57.1%	21.4%
Plered (Surakarta)	23.3%	66.7%	10.0%
Semarang	0.0%	15.4%	84.6%
Jepara	98.3%	1.7%	0.0%
Tegal	5.0%	48.6%	46.4%
Yogyakarta	19.9%	63.9%	16.2%
Malang	20.3%	78.9%	0.8%
Sidoarjo	31.1%	46.1%	22.8%
Surabaya	0.0%	75.0%	25.0%
Denpasar	26.2%	53.7%	20.1%

**p) Attributes of respondents**

	Top management	Designer	Public relation/ general management	Sales/ marketing	Export/ trading	Production	Others	Total
Home industry	55	6	5	2	1	3	21	75
Small-size industry	127	18	17	29	6	24	39	195
Medium-size industry	61	14	21	20	6	10	24	111
Large-size industry	7	2	7	0	1	6	4	19
<b>Total</b>	<b>250</b>	<b>40</b>	<b>50</b>	<b>51</b>	<b>14</b>	<b>43</b>	<b>88</b>	<b>400</b>

	Top management	Designer	Public relation/ general management	Sales/ marketing	Export/ trading	Production	Others	Total
Furniture (Wooden & Rattan)	39	7	6	10	2	7	9	60
Package & Food	27	6	5	6	1	10	18	48
Home electric appliance	1	2	0	3	0	2	0	4
Craft	109	15	7	16	6	14	28	149
Others	74	10	32	16	5	10	33	139
<b>Total</b>	<b>250</b>	<b>40</b>	<b>50</b>	<b>51</b>	<b>14</b>	<b>43</b>	<b>88</b>	<b>400</b>

	Top management	Designer	Public relation/ general management	Sales/ marketing	Export/ trading	Production	Others	Total
South Jakarta	21	3	7	2	0	3	17	36
East Jakarta	3	17	2	18	4	16	3	24
Central Jakarta	14	0	1	1	0	0	9	24
West Jakarta	22	0	2	0	0	1	0	25
North Jakarta	10	2	1	2	1	0	0	16
Sukabumi	15	1	0	6	3	5	8	16
Bandung	20	1	1	1	1	0	6	28
Cirebon	15	2	0	5	0	3	0	20
Plered (Surakarta)	8	0	1	1	0	0	14	15
Semarang	7	0	4	0	0	0	3	14
Jepara	11	0	1	0	0	0	0	12
Tegal	12	0	2	0	0	2	9	22
Yogyakarta	26	7	7	5	1	6	11	45
Malang	17	0	2	1	0	3	1	21
Sidoarjo	18	0	2	1	1	1	0	23
Surabaya	1	0	8	0	0	0	3	12
Denpasar	30	7	9	8	3	3	4	47
Total	250	40	50	51	14	43	88	400





# Questionnaire

## 1. Company Abstracts

- Industry Sector :  Furniture (Wooden & Rattan)  Home Electric Appliance  
 Package & Food  Craft  Others

- Name of Company : \_\_\_\_\_

- Date of Establishment: \_\_\_\_\_

- Number of Employees: \_\_\_\_\_

Full-time : \_\_\_\_\_

Part-time : \_\_\_\_\_

- Address of Head Office: \_\_\_\_\_  
\_\_\_\_\_

Tel : \_\_\_\_\_

Fax : \_\_\_\_\_

E-mail (Name of Personnel in charge) : \_\_\_\_\_ ( \_\_\_\_\_ )

- Location of Sub-Offices / Branches (if any) : \_\_\_\_\_  
\_\_\_\_\_

- Location of Factories (if any) : \_\_\_\_\_  
\_\_\_\_\_

- Capital (in Rupiah) : RP \_\_\_\_\_

- Annual Sales (in million of Rupiah) :

1998 (estimate) : RP \_\_\_\_\_

1997 : RP \_\_\_\_\_

1996 : RP \_\_\_\_\_

1995 : RP \_\_\_\_\_

- Proportion of Sales by Market

for Export : \_\_\_\_\_ % of Sales

for Domestic market : \_\_\_\_\_ % of Sales

Others (for ) : \_\_\_\_\_ % of Sales

100 %

**- Major Products Lines and approx. In order of annual Sales Value / Volume:**

	Product	Destination	Annual Sales
Example	Rattan Sofa	for Sweden, France & other	RP 150 million
Example	Rattan Chair Parts	for Domestic Sub-Contract	RP 80 million
Example	Soft Plastic Packaging for Candies and Chocolates	for Domestic	RP 180 million
Example	Electric Motors for Home Appliances	for Japan, US	RP 1,800 million
Example	Compact Blender (Juicer & Mixer Type)	for Domestic	RP 150 million
1.	_____	_____	RP _____ million
2.	_____	_____	RP _____ million
3.	_____	_____	RP _____ million
4.	_____	_____	RP _____ million
5.	_____	_____	RP _____ million
6.	_____	_____	RP _____ million
7.	_____	_____	RP _____ million

**- Position of Company in the Market:**

Please describe the position of your company, if available. (in sales share, ranking in sales volume, etc)

- Tie-up with foreign company (if any) : Country \_\_\_\_\_ in (e.g. sales) \_\_\_\_\_  
: Name \_\_\_\_\_

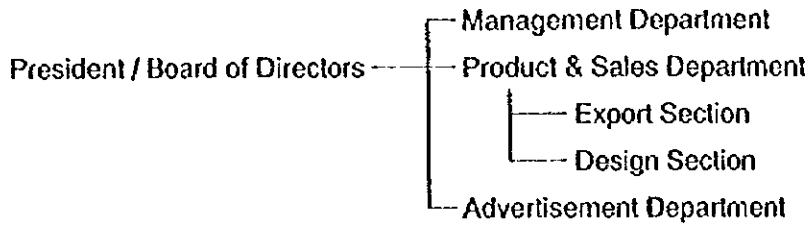
**- Names of Major Business Acquaintances (Customers / Clients):**

Domestic : \_\_\_\_\_ , \_\_\_\_\_  
: \_\_\_\_\_ , \_\_\_\_\_  
: \_\_\_\_\_ , \_\_\_\_\_

International: \_\_\_\_\_ ( \_\_\_\_\_ ) , \_\_\_\_\_ ( \_\_\_\_\_ )  
(country) : \_\_\_\_\_ ( \_\_\_\_\_ ) , \_\_\_\_\_ ( \_\_\_\_\_ )  
: \_\_\_\_\_ ( \_\_\_\_\_ ) , \_\_\_\_\_ ( \_\_\_\_\_ )

**- Organization of Company (Section/Department/Division) :**

**Example**



Please Indicate here:

**- Proportion of OEM/Sub-contracted Manufacturing (SCM)**

OEM / SCM	:	_____	% of Sales
Own brand products	:	_____	% of Sales
Others (            )	:	_____	% of Sales
		_____	
		100	%

**2. Design Situation**

**Type of Designers' Involvement:**

q.1) Does your company have designer(s) within your company?

1-1  **Yes** → number of designer(s) within your company: \_\_\_\_\_

(Designer's background)

1-1-1  basic education in design. (including trained on the job)

1-1-2  higher education in design. (university and/or higher level)

Please indicate the name of educational institute(s) and place(s)

(Designer's salary)

1-1-3  provided on a project basis

1-1-4  provided monthly on fixed amount basis

1-1-5  special arrangement provided (different calculation from other employees)

(Designer's Recruitment)

- 1-1-6  recruitment of designer(s) on regular base.  
number of designers: \_\_\_\_\_ in every \_\_\_\_\_ months.
- 1-1-7  on ad-hoc base.  
number of designers: \_\_\_\_\_ approx. once in \_\_\_\_\_ months.
- 1-1-8  no further recruitment is planned for now.

1-2  **No** (Please jump to the question q.3. afterward)

- 1-2-1  employment of designer(s) is not affordable. (Salary is too high.)
- 1-2-2  appropriate opportunity for recruiting designer(s) is limited.
- 1-2-3  no need for designer(s) within your company.

q.2) Does your company have a Design Section?

2-1  **Yes**

- 2-1-1  Designer(s) is in the management section.
- 2-1-2  Designer(s) is in the marketing section.
- 2-1-2-1  Designer(s) is in the engineering section.
- 2-1-3  Designer(s) is in the \_\_\_\_\_ section. (Please indicate.)
- 2-1-4  Designer(s) does not have any section, works independently.

2-2  **No**

q.3) Does your company have any relationship with Designer(s) outside of your company?

3-1  **Yes**, outside Designer(s) is hired/contracted when necessary,

- 3-1-1  through Agency → name(s) of Agency: \_\_\_\_\_
- 3-1-2  hired/contracted directly
- 3-1-3  by clients' instruction / work with clients' designer(s)
- 3-1-4  by parent company's instruction / work with parent company's designer(s)
- 3-1-5 If you indicate more than 1 in above questions, please indicate one major form of contract:  agency  
 direct  
 client  
 parent company

3-2  **No**, there is no need for designer(s) outside of your company, because

- 3-2-1  only designer(s) within your company is (are) involved in design.  
(No relationship with designer(s) outside of your company.)
- 3-2-2  all of the design comes from client(s) / parent company.
- 3-2-3  there is not any concern about design.

3-2-4  contracting outside designer(s) is not affordable. ( too expensive)

3-2-5  appropriate opportunity for contracting designer(s) is limited.

(limited information on designers, no access to agencies. )

### Equipment for Design

q.4) Please describe major equipment for design creation/development purpose in your company. (CAD/CAM, PC, other equipment for design drawing, etc)

### Original Design Generation

q.5) Does your company create your own design on your products?

5-1  Yes,

5-1-1  all the products is based on the original design.

5-1-2  most (over 50%) of the products is based on the original design.

5-1-3  a part (less than 50%) of the products is based on the original design.

5-2  No, ( Please jump to the question q.7. afterward)

5-2-1  all of the design comes from client(s) / parent company.

5-2-2  there is not any concern about the original design.

q.6) How do you create your own original design?

6-1  by referring/copying/improving similar products' design.

6-2  based on the instruction/specification/request from clients/parent company.

6-3  based on your own marketing/business strategic/designers' effort.

(The original design is created from the scratch.)

6-4 If you indicate more than 1 in above questions, please indicate one major way of creation:  referring similar product

from client/parent company

own effort

### Original Brand

q.7) Does your company have your own Brand Name on your products?

7-1  Yes,

7-1-1  all the products has certain (several) Original Brand Name(s).

7-1-2  most (over 50%) of the products has certain (several) Original Brand Name(s).

7-1-3  a part (less than 50%) of the products has certain (several) Original Brand Name(s).

7-2  No,

7-2-1  the Brand Name belongs to the client(s) / parent company.

7-2-2  there is not any concern about the Original Brand Name(s).

### Design Control / Delivery

q.8) How does your company deliver design plan to the production section?

8-1  Detailed design drawing is made and production section follows it.

8-2  Rough design drawing is made and production section gets the idea from it.  
Then, sample model(s) is made for approval.

8-3  Design plan/idea is made and production section gets the idea from it.  
Then, sample model(s) is made for approval.

8-4  Only specification plan, scale and/or color, is provided and production section makes sample model(s) for approval.

8-5  Others. \_\_\_\_\_ (please indicate)

q.9) Who would take initiatives in design control? (design quality control)

9-1  designer(s) takes full responsibility on design control.

9-2  following personnel takes responsibility on design control with designers' involvement.

9-2-1  personnel in the top management level.

9-2-2  personnel in the management/planning section.

9-2-3  personnel in the marketing/sales/trading section.

9-2-4  personnel in the engineering section.

9-2-5  personnel in the production section.

9-2-6  personnel in the \_\_\_\_\_ section. (please indicate)

9-2-7  special supervisor(s). (design/specification checker, etc.)

9-2-8  others. \_\_\_\_\_ (please indicate)

9-3  following personnel takes responsibility on design control.

9-3-1  personnel in the top management level.

9-3-2  personnel in the management/planning section.

9-3-3  personnel in the marketing/sales/trading section.

9-3-4  personnel in the engineering section.

9-3-5  personnel in the production section.

9-3-6  personnel in the \_\_\_\_\_ section. (please indicate)

9-3-7  special supervisor(s). (design/specification checker, etc.)

9-3-8  others. \_\_\_\_\_ (please indicate)

9-4  no one takes initiatives in design control.

q.10) Does your company have any specific function for design right, and/or copyright, management? (protection of rights)

10-1  No,

10-1-1  there is not any concern about design right protection.

10-1-2  design right is managed by client(s)/parent company.

10-1-3  design right is managed by outside designer(s)/agencies.

10-2  Yes, \_\_\_\_\_ is responsible for design rights protection.

Please indicate name of section and/or title of personnel.

### Improvement of Design Situation

q.11) Please indicate 3 most prior issues, priority, to improve current design situation in your company.

(Financial Foundation)

11-1  adequate financial foundation to spare for the equipment for design.

11-2  adequate financial foundation to spare for the recruitment designer(s).

11-3  adequate financial foundation to spare for hiring outside designer(s).

11-4  adequate financial foundation to spare for \_\_\_\_\_

(Human Resource)

11-5  appropriate training for designer(s).

11-6  appropriate training for employees in \_\_\_\_\_ section/level.

Please indicate section(s) and/or level of personnel.

11-7  easier access and/or appropriate opportunities for recruitment of designer(s).

(Technical Support)

11-8  technical support in laboratories or appropriate centers (e.g. design center).

11-9  detachment of consultants.

11-10  collaboration with other institutions (e.g. university).

11-11  rental equipment.

(Information Support)

11-12  information access to designers (designers' information, agencies, etc).

11-13  information on new design works.

11-14  information on technical support (design technique, design know-how, etc).

11-15  information on design activities (seminars, workshops, exhibition, etc)

11-15-1  international

11-15-2  domestic

11-16  information on \_\_\_\_\_. Please indicate.

(Laws and Regulations)

11-17  rules for protection of intellectual property rights including design rights.

11-18  models and/or guidelines for design contract terms, range of fees.



(Others)

11-19  Please describe if you have other issues to improve design situation in your company.

### 3. Design Promotion

#### Design Promotion Organizations / Programs

q.12) Has your company (or your employees) ever participated in any design programs?

If yes, please describe the detailed information for the most major one.

12-1  Yes,

12-1-2  Design Seminar

12-1-3  Design Training Program (workshop).

12-1-1  Design Competition / Exhibition

Domestic

International

→ Detailed Information

- Organizer / Sponsor:

- Name of Program:

- Evaluation:  Excellent  Good  Satisfactory  Poor

12-2  No, Your company has not participated in any program, because

12-2-1  there is not any concern about design programs.

12-2-2  your company has limited opportunity. (limited information.)

12-2-3  no budget for design activities

q.13) If there is a chance to participate in those programs in near future, does your company will participate in these programs

13-1  Yes,

13-1-2  Design Seminar

13-1-3  Design Training Program (workshop).

13-1-1  Design Competition / Exhibition

Domestic

International

13-2  No, Your company will not participate in any programs, because

13-2-1  there is not any concern about design programs.

13-2-2  there is not enough time to participate.

13-2-3  your company has adequate information/training/capability in design

13-2-4  they are usually found to be not so useful.

**Others**

q.14) Please describe briefly if you have any requests/problems/issues to be solved concerning Design in your company. (English is preferable, if possible.)

Please describe here:

q.15) This questionnaire has been answered by:

15-1  personnel in top management.

15-2  designer.

15-3  personnel in public relation/ general management.

15-4  personnel in sales/marketing.

15-5  personnel in export/trading.

15-6  personnel in production.

15-7  other (\_\_\_\_\_)





JICA