

DATA PENULIS

Nama : Rita Wijaya
Alamat Asal : Muara Utara I/11, Bandung 40243
No. Telepon : (022) 5204823
No. *Handphone* : 0812-2323-788
Alamat email : rita@bdg.centrin.com
Pendidikan : TK Aisyah, Majalaya
SD Bina Bakti I, Bandung
SD Santa Maria, Cirebon
SLTP Santa Maria, Cirebon
SMU Santa Maria I, Cirebon
SMU Santa Maria I, Bandung
Jurusan Teknik Industri Universitas Kristen Maranatha
Nilai Tugas Akhir : A
Tanggal USTA : 29 Januari 2005

KOMENTAR DOSEN PENGUJI

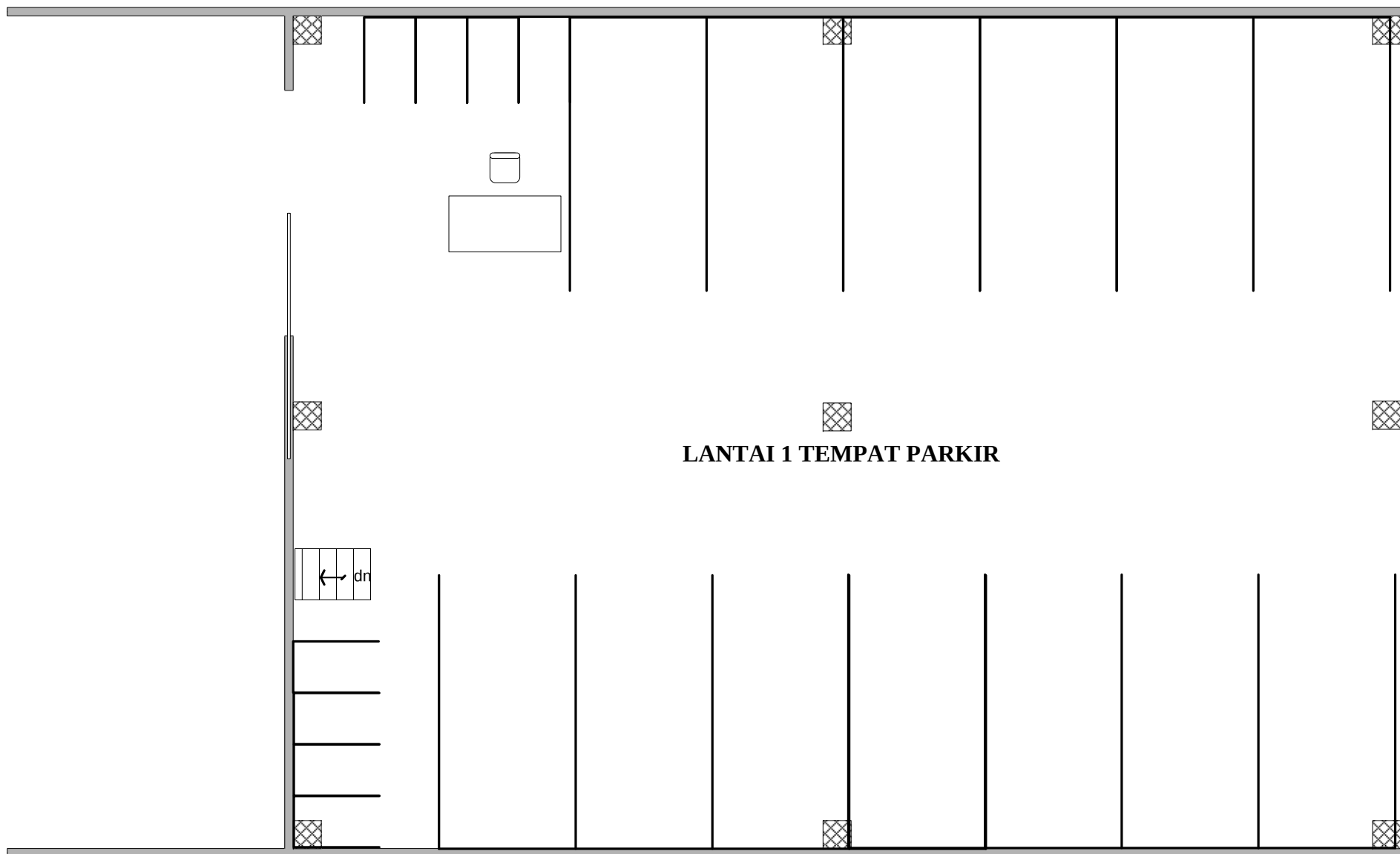
Nama Mahasiswa : Rita Wijaya

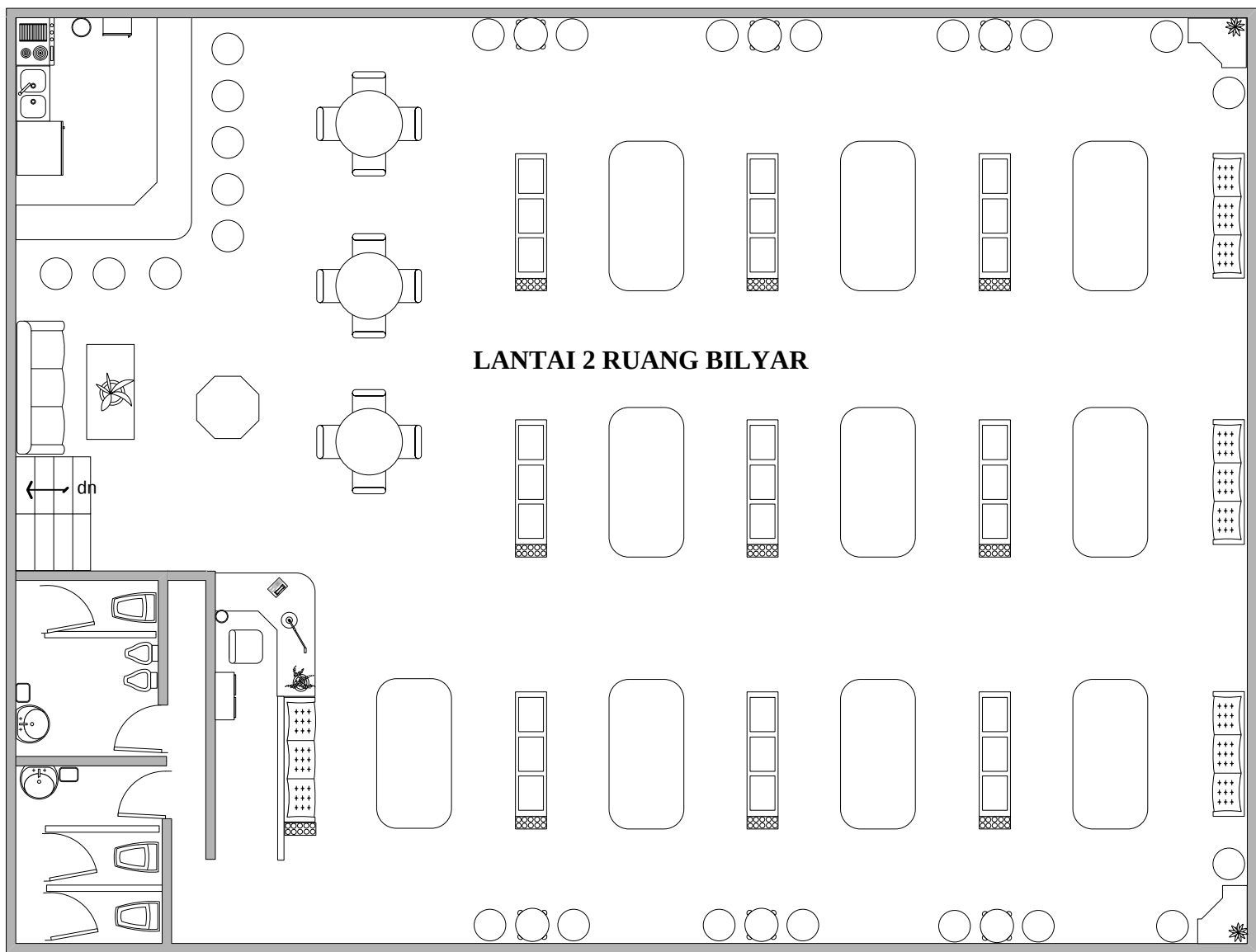
NRP : 0023156

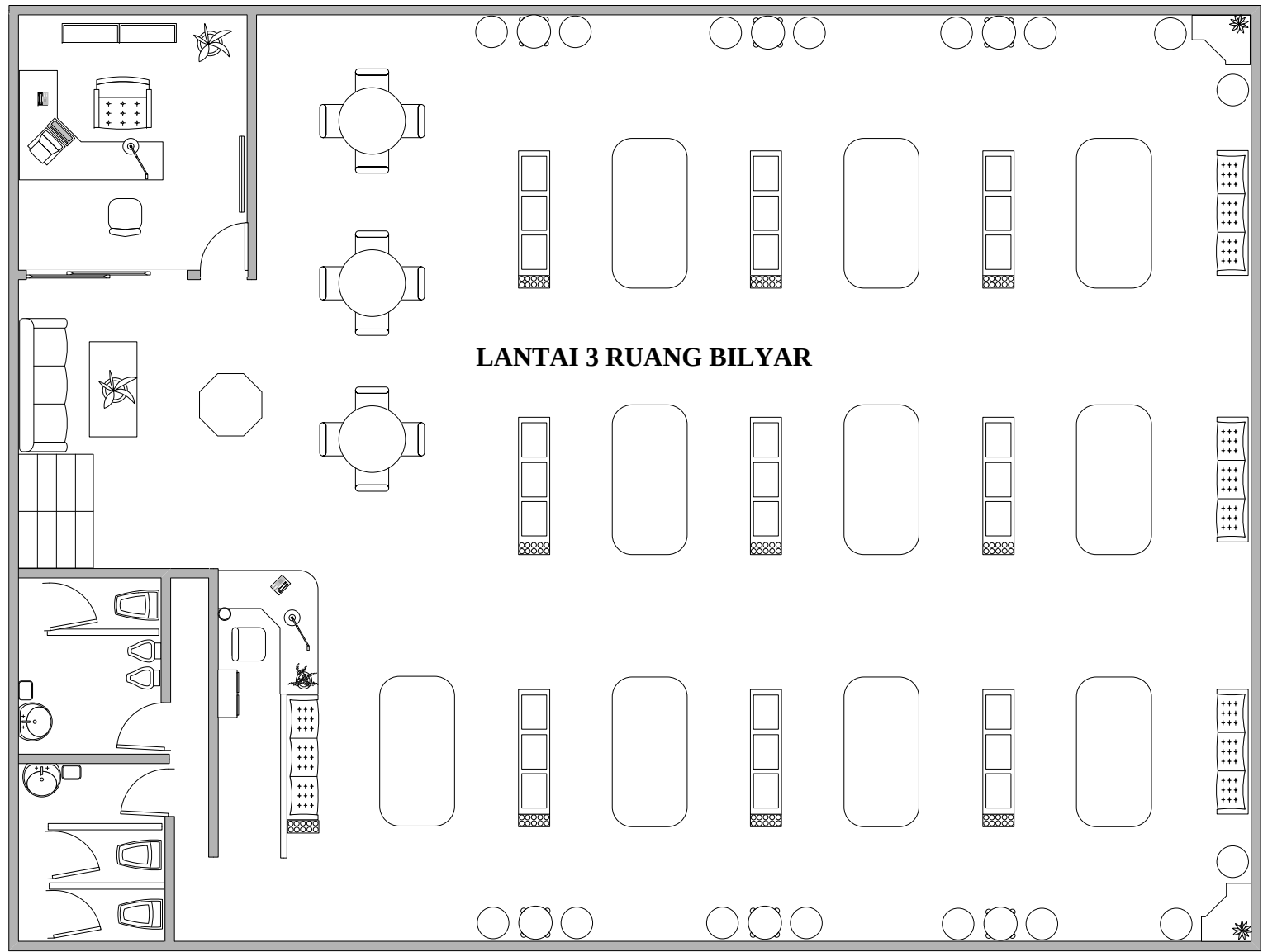
Judul Tugas Akhir : Analisis Kelayakan Pendirian Tempat Bilyar

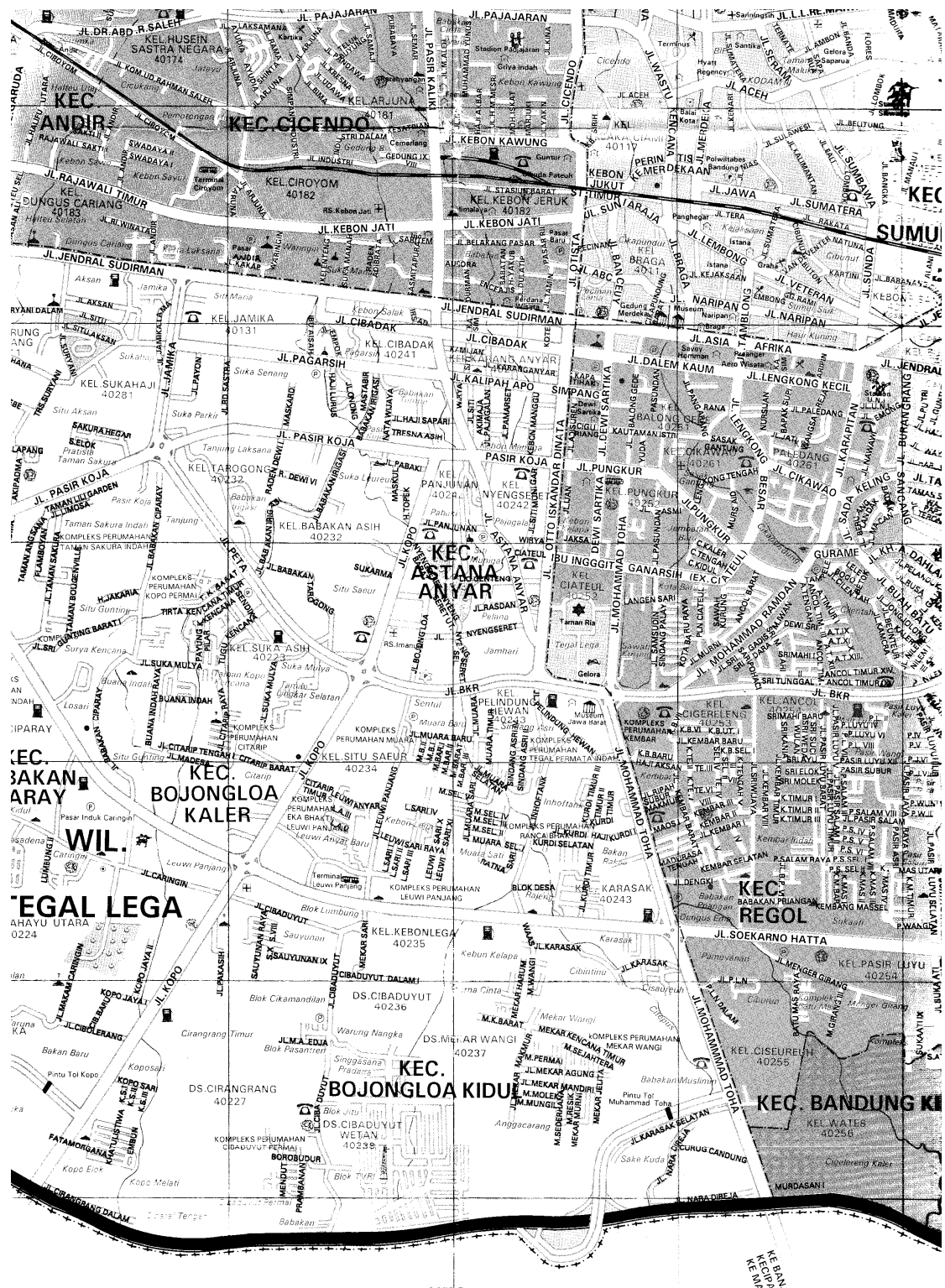
Komentar/Saran Dosen Penguji:

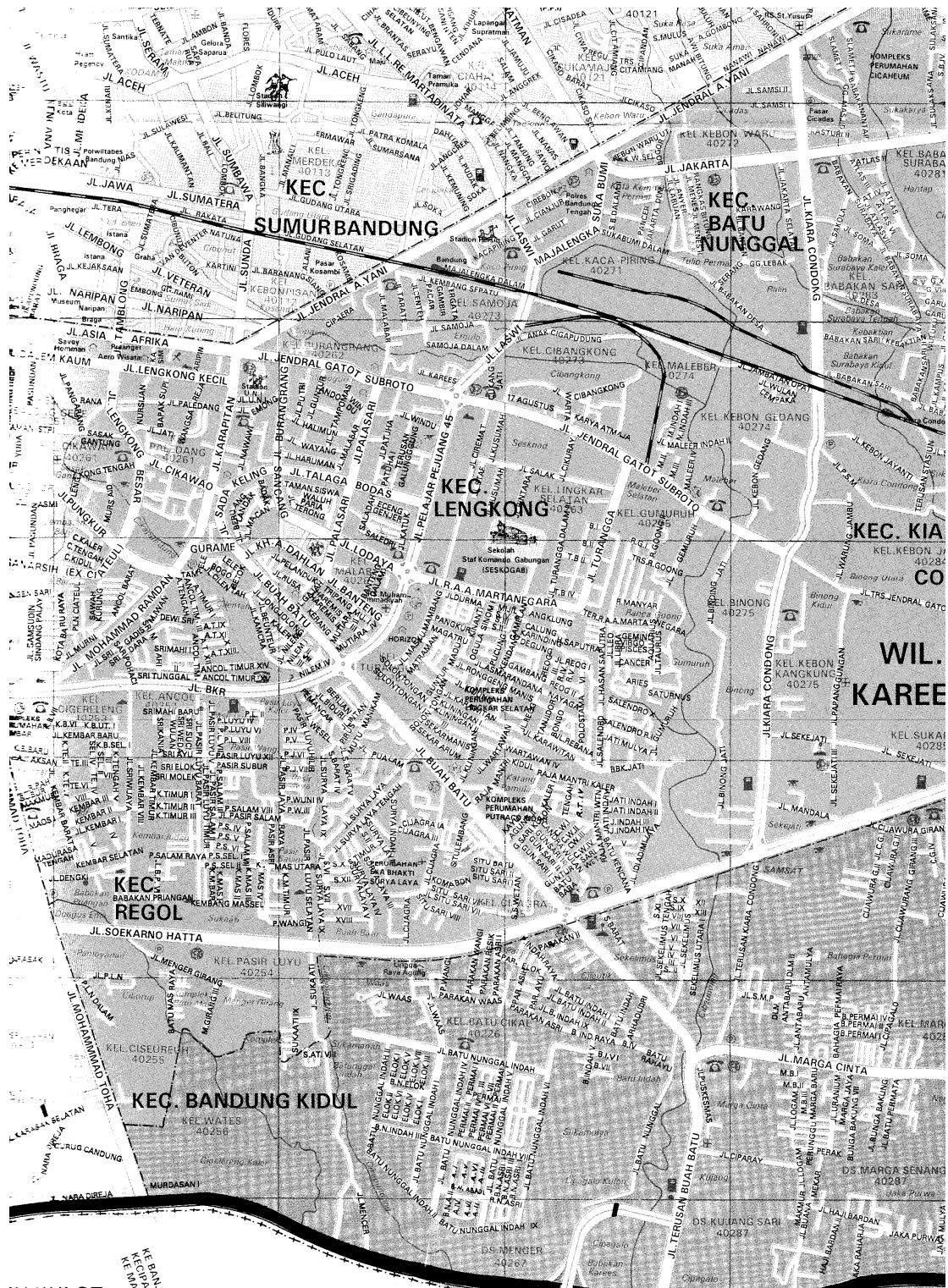
1. Belum jelas mengapa yang menjadi kompetitor adalah bilyar dengan pembayaran per jam.
2. Tabel 5.9: sumber mengetahui tempat olah raga bilyar baru adalah teman, jadi strateginya bagaimana?
3. Lampiran1-7: profil konsumen. Ada yang dibahas lebih lanjut, contoh: jenis kelamin, pendapatan → lengkapi, hubungkan dengan strategi.
4. Analisis sensitivitas? → kenapa harga jualnya (karena sensitif) disamakan dengan harga jual kompetitornya.
5. Tabel perhitungan & rincian finansial!
6. Tabel perhitungan untuk NPV, IRR,... yang tanpa tanah perlu gak?
7. Rincian shift karyawan.
8. Abstrak: teori 8 gaya hidup VALS → dihapus karena bukan hasil penelitian.
9. Apa maksud dari representatif?
10. Persen kelonggaran 10% → masukkan dalam asumsi Bab 1.
11. Teori *purposive sampling* ditambahkan pada Bab 2.
12. Penyebaran kuesioner VALS: seimbang (hal 3-9), berapa? Dalam jumlah.
13. Ijin dari pemerintah, apakah merupakan dampak sosial?











FC provides many performance measures for time series forecasting algorithms. Let's use the following notation to describe the measures:

$x(t)$: Actual (historical) data at time t , $t=1,...,n$
 $f(t)$: The forecast (prediction) of time t
 $e(t)$: Residual or forecast error at time t , $e(t) = x(t) - f(t)$

The measures include:

CFE: Cumulative forecast error = $\sum e(t)$, $t=1,...,n$
MAD: Mean absolute deviation = $\sum |e(t)| / n$, $t=1,...,n$
MSE: Mean square error = $\sum [e(t)]^2 / n$, $t=1,...,n$
MAPE: Mean absolute percent error = $100 \sum [|e(t)|/x(t)] / n$, $t=1,...,n$
Tracking signal = CFE / MAD
r-square = coefficient of determination = SSR/SST
Adjusted r-square = adjusted coefficient of determination = $1-(n-1)SSE/SST/(n-2)$

Contoh Perhitungan untuk Linear Regression with Time:

MAD = $(151.2 + 28.1 + 397.4 + 274.3)/4 = 212.7501$

MSE = $151.2^2/4 + 28.1^2/4 + 397.4^2/4 + 274.3^2/4 = 64204.64$

MAPE = $100 * (151.2/6235/4 + 28.1/7598/4 + 397.4/8771/4 + 274.3/10985/4) = 2.455686$

Pembagian Shift Kerja

Dengan asumsi bahwa 1 orang dapat melayani 2 meja, dan tempat olah raga direncanakan mempunyai 20 meja, maka pada shift malam akan digunakan 10 orang *waiter/waitress*.

Dengan diketahui perbandingan waktu main antara malam dan siang yaitu 0.8:0.2 maka jumlah yang disediakan pada siang hari yaitu 3 sampai 4 orang *waiter/waitress*.

Keterangan :

Depresiasi untuk no 1 adalah 5% per tahun.

Depresiasi untuk no 2-27 adalah 10% per tahun.

Depresiasi untuk no 28-30 adalah 100% per tahun.

Contoh perhitungan:

Depresiasi bangunan tahun ke 1 = $550.000.000 \times 5\% = 27.500.000$

Depresiasi bangunan tahun ke 2 = $(550.000.000 - 27.500.000) \times 5\% = 26.125.000$

Depresiasi bangunan tahun ke 3 = $(550.000.000 - 27.500.000 - 26.125.000) \times 5\% = 24.818.750$

Depresiasi bangunan tahun ke 4 = $(550.000.000 - 27.500.000 - 26.125.000 - 24.818.750) \times 5\% = 23.577.812,5$

Perbandingan Jumlah Meja Para Kompetitor

Kompetitor	Jumlah Meja
Warung Bandung	23
GUBA Bilyar	15
Hot Shot Bilyar	16
Nine Ball	31
Planet Pool	16
SM Bilyar	16
TOTAL	117

Besar Gaji Karyawan per Bulan

Tahun ke-	Jumlah (Rp)
1	600,000.00
2	660,000.00
3	726,000.00
4	798,600.00
5	878,500.00
6	966,350.00

Contoh Perhitungan BEP

Biaya yang termasuk ke dalam *fixed cost* (FC) adalah biaya pekerja tidak langsung, biaya administrasi dan umum, biaya depresiasi.

Biaya yang termasuk ke dalam *variabel cost* (VC) adalah biaya promosi, biaya listrik, biaya telepon dan biaya perawatan peralatan dan bangunan.

$$FC = A*12 + B*66 + C + D$$

A = biaya pekrj tak lgs per bln utk thn 1-6

$$A = 3600000 + 3960000 + 4356000 + 4791600 + 5271000 + 5798100$$

B = biaya adm&umum bln 1-11 utk thn 1-6

$$B = 520000$$

C = biaya adm&umum bln 12 untuk thn 1-6

$$C = 21120000 + 27680000 + 24396000 + 31283600 + 28342800 + 35645100$$

D = biaya depresiasi untuk thn 1-6

$$D = 59362000 + 54017800 + 49922270 + 46170980,5 + 42732773,08 + 39579441,86$$

$$VC = A*72 + B$$

A = biaya tlp, list, perawatan peralt&bangunan → dr HPP

$$A = 800000 + 1500000 + 600000$$

B = biaya promosi

$$B = 2420000 + 150000$$

P = total penjualan utk thn 1-6

$$P = 411,044,174.64 + 558,806,094.00 + 665,809,634.16 + 772,813,174.32 + 879,816,714.48 + 986,820,254.64$$

Contoh Perhitungan Analisis Sensitivitas

$$VC = (\text{tlp, list, perawatan peralt\&bangunan} \rightarrow \text{dr HPP utk 1 bln})/1788$$

$$VC = (800000 + 1500000 + 600000)/1788$$

FC = pek tak lgs + adm&umum + depresiasi

$$FC = 3600000 + 520000 + 4946833$$

Contoh Perhitungan Estimasi Penjualan

Untuk bulan pertama, tahun pertama:

$$\text{Penjualan} = 7\% * 12253 = 857,71$$

$$\text{Jumlah} = 857,71 * 20\% * 15000 + 857,71 * 80\% * 21000 = 16.982.658$$

Untuk bulan keempat, tahun pertama:

$$\text{Penjualan} = 14.6\% * 12253 = 1788,938$$

$$\text{Jumlah} = 1788,938 * 20\% * 15000 + 1788,938 * 80\% * 21000 = 35.420.972,4$$

LAMPIRAN 3

Commercial Rates Ninety Niners

Perhitungan Depresiasi

Perhitungan HPP

Perhitungan Laporan Rugi Laba

Perhitungan Aliran Kas

Perhitungan Neraca

Contoh Perhitungan BEP, Analisis

Sensitivitas, Penjualan

LAMPIRAN 1

Jumlah Penduduk Kota Bandung
Kuesioner Asli VALS
Kuesioner VALS (Terjemahan)
Data Mentah Hasil Penyebaran Kuesioner
Hasil VALS

LAMPIRAN 2

Hasil Peramalan Permintaan dengan *Linear
Regresion*

Hasil Peramalan Permintaan dengan *Moving
Average with LinearTrend (M=2)*

Hasil Peramalan Permintaan dengan *Moving
Average with LinearTrend (M=3)*

Perhitungan Nilai-Nilai Error

Tabel
Table

3.1.5

JUMLAH PENDUDUK W N I KOTA BANDUNG MENURUT KECAMATAN DAN JENIS KELAMIN PADA AKHIR TAHUN 2002
TOTAL POPULATION OF INDONESIAN IN BANDUNG CITY BY SUB DISTRICT AND SEX IN THE END OF 2002

Kecamatan Sub District		Laki-laki Male	Perempuan Female	Jumlah Total
[1]		[2]	[3]	[4]
1	Bandung Kulon	47.648	46.937	94.585
2	Babakan Ciparay	42.430	41.823	84.253
3	Bojongloa Kaler	43.377	41.457	84.834
4	Bojongloa Kidul	29.266	29.876	59.142
5	Astanaanyar	35.056	34.880	69.936
6	R e g o l	34.171	35.526	69.697
7	Lengkong	35.486	34.265	69.751
8	Bandung Kidul	17.115	17.114	34.229
9	Margacinta	36.449	37.263	73.712
10	Rancasari	25.716	25.897	51.613
11	Cibiru	28.965	30.020	58.985
12	Ujungberung	29.744	29.854	59.598
13	Arcamanik	36.008	33.808	69.816
14	Cicadas	43.638	42.066	85.704
15	Kiaracondong	53.311	50.554	103.865
16	Batununggal	51.651	51.365	103.016
17	Sumur Bandung	18.992	20.293	39.285
18	A n d i r	43.686	45.081	88.767
19	Cicendo	43.223	42.051	85.274
20	Bandung Wetan	20.422	34.676	55.098
21	Cibeunying Kidul	46.723	44.343	91.066
22	Cibeunying Kaler	27.286	27.106	54.392
23	Coblong	50.791	46.305	97.096
24	Sukajadi	40.929	39.004	79.933
25	Sukasari	28.413	31.983	60.396
26	Cidadap	21.586	21.381	42.967
Jumlah / Total 2002		932.082	934.928	1.867.010
2001		876.773	861.147	1.737.920
2000		1.075.468	1.058.353	2.133.821
1999		936.143	924.747	1.860.890
1998		931.686	920.392	1.852.077
1997		893.850	877.920	1.771.770

Sumber : BPS Kota Bandung (Hasil Registrasi Penduduk 2002)
Source : Statistical of Bandung City (Registra Result of Population 2002)

Untitled

1. I am often interested in theories.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
2. I like outrageous people and things.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
3. I like a lot of variety in my life.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
4. I love to make things I can use everyday.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
5. I follow the latest trends and fashions.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
6. Just as the Bible says, the world literally was created in six days.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
7. I like being in charge of a group.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
8. I like to learn about art, culture, and history.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
9. I often crave excitement.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
10. I am really interested only in a few things.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
11. I would rather make something than buy it.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
12. I dress more fashionably than most people.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
13. The federal government should encourage prayers in public schools.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
14. I have more ability than most people.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
15. I consider myself an intellectual.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
16. I must admit that I like to show off.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
17. I like trying new things.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
18. I am very interested in how mechanical things, such as engines, work.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
19. I like to dress in the latest fashions.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
20. There is too much sex on television today.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
21. I like to lead others.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
22. I would like to spend a year or more in a foreign country.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
23. I like a lot of excitement in my life.
Mostly disagree Somewhat disagree Somewhat agree Mostly agree
24. I must admit that my interests are somewhat narrow and limited.

	Mostly disagree	Somewhat disagree	Untitled Somewhat agree	Mostly agree
25. I like making things of wood, metal, or other such material.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
26. I want to be considered fashionable.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
27. A woman's life is fulfilled only if she can provide a happy home for her family.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
28. I like the challenge of doing something I have never done before.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
29. I like to learn about things even if they may never be of any use to me.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
30. I like to make things with my hands.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
31. I am always looking for a thrill.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
32. I like doing things that are new and different.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
33. I like to look through hardware or automotive stores.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
34. I would like to understand more about how the universe works.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree
35. I like my life to be pretty much the same from week to week.	Mostly disagree	Somewhat disagree	Somewhat agree	Mostly agree

36. Sex: Male Female

37. Age: 18-24 25-29 30-34 35-44 45-54 55-64 65 or over

38. What is the highest level of formal education you have completed?
 Grade 8 or less Grades 9-11 High School 1-3 years of college
 College (4 years) Attended or completed graduate school

39. What was your total household income before taxes for the past calendar year (January through December)? (Please include income from all sources, including salaries, pensions, interest, dividends, bonuses, capital gains, profits, other.)

less than \$10,000	\$10,000 - \$14,999	\$15,000 - \$19,999
\$20,000 - \$24,999	\$25,000 - \$29,999	\$30,000 - \$39,999
\$40,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999
\$100,000 - \$199,999	\$200,000 or more	