

## ABSTRAK

PT.CIC Futures adalah perusahaan pialang berjangka dan berhak melakukan penarikan dan penghimpunan dana masyarakat yang akan berinvestasi di bidang perdagangan berjangka komoditi dengan legal, tetapi hingga saat ini belum menggunakan sistem informasi khususnya untuk karyawan. Sehingga masalah utama yang terjadi saat ini adalah tidak teraturnya data – data karyawan, tidak adanya *monitoring* terhadap kinerja para *employee* dan struktur organisasi yang tidak rapih. Oleh karena itu, perusahaan ini membutuhkan aplikasi yang dapat membantu untuk menyimpan data – data karyawan, membuat struktur organisasi lebih rapih, dan aplikasi yang dapat menghitung komisi untuk para *employee*, memberi penilaian terhadap karyawan nya. Aplikasi ini akan menggunakan bahasa pemrograman C# dan akan mempunyai hak akses yang digunakan dalam membuat data *employee* lebih rapih.

Kata kunci: penilaian, *monitoring*, *employee*, komisi.

## **ABSTRACT**

PT.CIC Futures is a periodic broker company and have the right to withdraw and collect people's fund who will invest in type of periodic commerce legally, however until today this particular company still using information system especially for the human capital. Hence, the issues that currently occurred are, irregular human capital's data's, unavailability of monitoring regarding the performance of the employees and unsorted accordingly. Therefore, this company requires an application that are able to help to store employees data's, make organizational structure more organized, and an application that can help to count the employees commission also evaluate the level of the performance for their employees. This application will be using C# programming language; moreover it will have the access right which it will be use in order to compose employees data's more neatly.

Keywords: evaluation, monitoring, employee, commission.

# DAFTAR ISI

PRAKATA.....	i
SURAT PERNYATAAN ORISINALITAS KARYA .....	iii
ABSTRAK.....	iv
ABSTRACT .....	v
DAFTAR ISI.....	vi
DAFTAR GAMBAR.....	ix
DAFTAR TABEL.....	xiv
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang Masalah .....	1
I.2 Rumusan Masalah .....	1
I.3 Tujuan Pembahasan .....	2
I.4 Ruang Lingkup Kajian .....	2
I.5 Sumber Data.....	3
I.6 Sistematika Penulisan.....	3
BAB II KAJIAN TEORI .....	5
II.1 Pengenalan Bahasa C# [5] .....	5
II.2 Visual Studio .NET [5].....	7
II.3 <i>Framework</i> .NET [5].....	7
II.4 Basis Data [4].....	9
II.5 ERD ( <i>Entity Relationship Diagram</i> ) [2] .....	10
II.6 Data Flow Diagram (DFD) [1].....	12
II.6.1 Kamus Data [7].....	14
II.6.2 Spesifikasi Proses ( <i>Process Specification</i> (PSPEC)).....	15
II.7 <i>Software Testing</i> [8] .....	16
II.7.1 <i>Black Box Testing</i> .....	16
II.7.2 <i>White Box Testing</i> [12].....	17
BAB III ANALISIS DAN RANCANGAN SISTEM.....	19
III.1 Proses Bisnis .....	19
III.1.1 Skema Data Karyawan .....	20
III.1.2 Jenis <i>Account</i> dan Perhitungan Komisi.....	20
III.2 <i>Entity Relationship Diagram</i> .....	23
III.3 Transformasi ER ke dalam Tabel .....	24
III.4 <i>Data Flow Diagram</i> .....	25
III.4.1 DFD <i>Level 0</i> .....	25
III.4.2 DFD <i>Level 1</i> .....	26
III.4.3 DFD <i>Level 2</i> .....	28
III.4.4 DFD <i>Level 3</i> .....	35
III.5 Kamus Data .....	39
III.6 Spesifikasi Proses ( <i>Process Specification</i> ).....	44
III.7 Desain Antar Muka.....	64
III.7.1 <i>Form Login</i> .....	64
III.7.2 <i>Form Main Menu</i> .....	65
III.7.3 <i>Form Data Employee</i> .....	65
III.7.4 <i>Form Data Account</i> .....	68
III.7.5 <i>Form Type Account</i> .....	70
III.7.6 <i>Form Komisi Per Lot</i> .....	71

III.7.7	<i>Add Komisi Trader</i> .....	73
III.7.8	<i>View Komisi Trader</i> .....	73
III.7.9	<i>Form Grade</i> .....	74
III.7.10	<i>Form Reward</i> .....	77
III.7.11	<i>Form User</i> .....	81
III.7.12	<i>Form Kegiatan</i> .....	82
BAB IV	HASIL PENELITIAN.....	84
IV.1	Tampilan Halaman <i>Login</i> .....	84
IV.2	Tampilan Halaman <i>Main Form</i> .....	84
IV.3	Tampilan Halaman <i>Employee</i> .....	85
IV.3.1	Tampilan <i>Add Employee</i> .....	86
IV.3.2	Tampilan <i>Edit Employee</i> .....	87
IV.3.3	Tampilan <i>Print Employee</i> .....	88
IV.4	Tampilan Halaman <i>Account</i> .....	88
IV.4.1	Tampilan <i>Add Account</i> .....	89
IV.4.2	Tampilan <i>Edit Account</i> .....	89
IV.4.3	Tampilan <i>Print Account</i> .....	90
IV.5	Tampilan <i>Type Account</i> .....	91
IV.5.1	Tampilan <i>Add Type Account</i> .....	91
IV.5.2	Tampilan <i>Komisi Per Lot</i> .....	92
IV.6	Tampilan <i>User</i> .....	95
IV.6.1	Tampilan <i>Add User</i> .....	95
IV.6.2	Tampilan <i>Delete User</i> .....	95
IV.6.3	Tampilan <i>Change Password</i> .....	96
IV.7	Tampilan Halaman <i>Komisi</i> .....	96
IV.7.1	Tampilan <i>Add Komisi</i> .....	98
IV.7.2	Tampilan <i>Print Komisi Master</i> .....	100
IV.7.3	Tampilan <i>Print Komisi Detail</i> .....	101
IV.8	Tampilan Halaman <i>Kegiatan</i> .....	101
IV.8.1	Tampilan <i>Add Kegiatan</i> .....	102
IV.8.2	Tampilan <i>Edit Kegiatan</i> .....	103
IV.8.3	Tampilan <i>Print Kegiatan</i> .....	104
IV.9	Tampilan Halaman <i>Reward BC</i> .....	105
IV.9.1	Tampilan Halaman <i>Add Reward BC</i> .....	106
IV.9.2	Tampilan Halaman <i>Print Reward BC</i> .....	106
IV.10	Tampilan Halaman <i>Reward Trader</i> .....	107
IV.10.1	Tampilan Halaman <i>Add Reward Trader</i> .....	107
IV.10.2	Tampilan Halaman <i>Print Reward Trader</i> .....	108
IV.11	Tampilan Halaman <i>Grade BC</i> .....	109
IV.11.1	Tampilan Halaman <i>Add Grade BC</i> .....	110
IV.11.2	Tampilan Halaman <i>Edit Grade BC</i> .....	110
IV.11.3	Tampilan Halaman <i>Print Grade BC</i> .....	111
IV.12	Tampilan Halaman <i>Grade Trader</i> .....	112
IV.12.1	Tampilan Halaman <i>Add Grade Trader</i> .....	113
IV.12.2	Tampilan Halaman <i>Edit Grade Trader</i> .....	113
IV.12.3	Tampilan Halaman <i>Print Grade Trader</i> .....	114
IV.13	Tampilan Halaman <i>Laporan</i> .....	115
IV.13.1	Tampilan Halaman <i>Laporan Reward BC</i> .....	115
IV.13.2	Tampilan Halaman <i>Laporan Reward Trader</i> .....	116
IV.13.3	Tampilan Halaman <i>Laporan Transaksi</i> .....	117
BAB V	PEMBAHASAN DAN UJI COBA HASIL PENELITIAN.....	122

BAB VI SIMPULAN DAN SARAN .....	142
VI.1 Simpulan.....	142
VI.2 Saran .....	142
DAFTAR PUSTAKA.....	1

## DAFTAR GAMBAR

Gambar 1 Entitas .....	11
Gambar 2 Relasi .....	11
Gambar 3 Atribut.....	11
Gambar 4 Kardinalitas <i>One to one</i> .....	11
Gambar 5 Kardinalitas <i>One to many</i> .....	12
Gambar 6 Kardinalitas <i>many to many</i> .....	12
Gambar 7 Notasi Kesatuan Luar pada DFD .....	13
Gambar 8 Arus data.....	13
Gambar 9 Proses.....	14
Gambar 10 Penyimpanan Data.....	14
Gambar 11 Proses Bisnis .....	19
Gambar 12 Skema Data Karyawan .....	20
Gambar 13 <i>Entity Realtionship Diagram</i> .....	23
Gambar 14 Transformasi ER ke dalam Tabel.....	24
Gambar 15 DFD <i>Level 0</i> .....	25
Gambar 16 DFD <i>Level 1</i> .....	27
Gambar 17 DFD <i>Level 2</i> Proses 1 (Login).....	28
Gambar 18 DFD <i>Level 2</i> Proses 2 ( <i>Employee</i> ).....	28
Gambar 19 DFD <i>Level 2</i> Proses 3 ( <i>Account</i> ).....	29
Gambar 20 DFD <i>Level 2</i> Proses 4 (Komisi).....	30
Gambar 21 DFD <i>Level 2</i> Proses 5 ( <i>Grade</i> ).....	31
Gambar 22 DFD <i>Level 2</i> Proses 6 ( <i>Reward</i> ) .....	31
Gambar 23 DFD <i>Level 2</i> Proses 7 ( <i>User</i> ) .....	32
Gambar 24 DFD <i>Level 2</i> Proses 8 (Kegiatan).....	33
Gambar 25 DFD <i>Level 2</i> Proses 9 ( <i>Type Account</i> ).....	34
Gambar 26 DFD <i>Level 3</i> Proses 5.1 ( <i>Grade Business Consultant</i> ) .....	35
Gambar 27 DFD <i>Level 3</i> Proses 5.2 ( <i>Grade Trader</i> ) .....	36
Gambar 28 DFD <i>Level 3</i> Proses 6.1 ( <i>Reward Business Consultant</i> ).....	37
Gambar 29 DFD <i>Level 3</i> Proses 6.2 ( <i>Reward Trader</i> ).....	38

Gambar 30 DFD <i>Level 3</i> Proses 9.3 (Komisi Per Lot) .....	39
Gambar 31 Halaman <i>Login</i> .....	64
Gambar 32 Halaman Main Menu .....	65
Gambar 33 Halaman Data <i>Employee</i> .....	65
Gambar 34 Halaman <i>Add Employee</i> .....	66
Gambar 35 Halaman <i>Edit Employee</i> .....	66
Gambar 36 Halaman <i>Delete Employee</i> .....	67
Gambar 37 Halaman <i>Search Employee</i> .....	67
Gambar 38 Halaman Data <i>Account</i> .....	68
Gambar 39 Halaman <i>Add Account</i> .....	68
Gambar 40 Halaman <i>Edit Account</i> .....	68
Gambar 41 Halaman <i>Delete Account</i> .....	69
Gambar 42 Halaman <i>Search Account</i> .....	70
Gambar 43 Halaman Data <i>Type Account</i> .....	70
Gambar 44 Halaman <i>Add Type Account</i> .....	71
Gambar 45 Halaman Komisi Per Lot .....	71
Gambar 46 Halaman <i>Add Komisi Per Lot</i> .....	72
Gambar 47 Halaman <i>Edit Komisi Per Lot</i> .....	72
Gambar 48 Halaman <i>Add Komisi Trader</i> .....	73
Gambar 49 Halaman <i>View Komisi Trader</i> .....	73
Gambar 50 Halaman <i>Grade</i> .....	74
Gambar 51 Halaman Data <i>Grade Business Consultant</i> .....	74
Gambar 52 Halaman <i>Add Grade Business Consultant</i> .....	74
Gambar 53 Halaman <i>Edit Grade Business Consultant</i> .....	74
Gambar 54 Halaman <i>Delete Grade Business Consultant</i> .....	75
Gambar 55 Halaman <i>Search Grade Business Consultant</i> .....	75
Gambar 56 Halaman Data <i>Grade Trader</i> .....	76
Gambar 57 Halaman <i>Add Grade Trader</i> .....	76
Gambar 58 Halaman <i>Edit Grade Trader</i> .....	76
Gambar 59 Halaman <i>Delete Grade Trader</i> .....	77
Gambar 60 Halaman <i>Search Grade Trader</i> .....	77
Gambar 61 Halaman <i>Reward</i> .....	77

Gambar 62 Halaman Data <i>Reward Business Consultant</i> .....	78
Gambar 63 Halaman <i>Add Reward Business Consultant</i> .....	78
Gambar 64 Halaman <i>Edit Reward Business Consultant</i> .....	78
Gambar 65 Halaman <i>Search Reward Business Consultant</i> .....	79
Gambar 66 Halaman Data <i>Reward Trader</i> .....	79
Gambar 67 Halaman <i>Add Reward Trader</i> .....	80
Gambar 68 Halaman <i>Edit Reward Trader</i> .....	80
Gambar 69 Halaman <i>Search Reward Trader</i> .....	80
Gambar 70 Halaman Data <i>User</i> .....	81
Gambar 71 Halaman <i>Add User</i> .....	81
Gambar 72 Halaman <i>Change Password</i> .....	81
Gambar 73 Halaman Data <i>Kegiatan</i> .....	82
Gambar 74 Halaman <i>Add Kegiatan</i> .....	82
Gambar 75 Halaman <i>Edit Kegiatan</i> .....	83
Gambar 76 Halaman <i>Delete Kegiatan</i> .....	83
Gambar 77 Halaman <i>Search Kegiatan</i> .....	83
Gambar 78 <i>Screenshot</i> Halaman <i>Login</i> .....	84
Gambar 79 <i>Screenshot</i> Halaman <i>MainForm</i> .....	84
Gambar 80 <i>Screenshot</i> Halaman <i>Employee</i> .....	85
Gambar 81 <i>Screenshot</i> Halaman <i>Add Employee</i> .....	86
Gambar 82 <i>Screenshot</i> Halaman <i>Edit Employee</i> .....	87
Gambar 83 <i>Screenshot</i> Halaman <i>Print Employee</i> .....	88
Gambar 84 <i>Screenshot</i> Halaman <i>Account</i> .....	88
Gambar 85 <i>Screenshot</i> Halaman <i>Add Account</i> .....	89
Gambar 86 <i>Screenshot</i> Halaman <i>Edit Account</i> .....	89
Gambar 87 <i>Screenshot</i> Halaman <i>Print Account</i> .....	90
Gambar 88 <i>Screenshot</i> Halaman <i>Type Account</i> .....	91
Gambar 89 <i>Screenshot</i> Halaman <i>Add Type Account</i> .....	91
Gambar 90 <i>Screenshot</i> Halaman <i>Komisi Per Lot</i> .....	92
Gambar 91 <i>Screenshot</i> Halaman <i>Add Komisi Per Lot</i> .....	93
Gambar 92 <i>Screenshot</i> Halaman <i>Edit Komisi Per Lot</i> .....	93
Gambar 93 <i>Screenshot</i> Halaman <i>Print Komisi Per Lot</i> .....	94



Gambar 94 <i>Screenshot</i> Halaman <i>Add User</i> .....	95
Gambar 95 <i>Screenshot</i> Halaman <i>Delete User</i> .....	95
Gambar 96 <i>Screenshot</i> Halaman <i>Change Password</i> .....	96
Gambar 97 <i>Screenshot</i> Halaman <i>Komisi</i> .....	96
Gambar 98 <i>Screenshot</i> Halaman <i>Add Komisi</i> .....	99
Gambar 99 <i>Screenshot</i> Halaman <i>Print Komisi Master</i> .....	100
Gambar 100 <i>Screenshot</i> Halaman <i>Print Komisi Detail</i> .....	101
Gambar 101 <i>Screenshot</i> Halaman <i>Kegiatan</i> .....	101
Gambar 102 <i>Screenshot</i> Halaman <i>Add Kegiatan</i> .....	102
Gambar 103 <i>Screenshot</i> Halaman <i>Edit Kegiatan</i> .....	103
Gambar 104 <i>Screenshot</i> Halaman <i>Print Kegiatan</i> .....	104
Gambar 105 <i>Screenshot</i> Halaman <i>Grade BC</i> .....	105
Gambar 106 <i>Screenshot</i> Halaman <i>Add Reward BC</i> .....	106
Gambar 107 <i>Screenshot</i> Halaman <i>Print Grade BC</i> .....	106
Gambar 108 <i>Screenshot</i> Halaman <i>Reward Trader</i> .....	107
Gambar 109 <i>Screenshot</i> Halaman <i>Add Reward Trader</i> .....	107
Gambar 110 <i>Screenshot</i> Halaman <i>Print Reward Trader</i> .....	108
Gambar 111 <i>Screenshot</i> Halaman <i>Grade BC</i> .....	109
Gambar 112 <i>Screenshot</i> Halaman <i>Add Grade BC</i> .....	110
Gambar 113 <i>Screenshot</i> Halaman <i>Edit Grade BC</i> .....	110
Gambar 114 <i>Screenshot</i> Halaman <i>Print Grade BC</i> .....	111
Gambar 115 <i>Screenshot</i> Halaman <i>Grade Trader</i> .....	112
Gambar 116 <i>Screenshot</i> Halaman <i>Add Grade Trader</i> .....	113
Gambar 117 <i>Screenshot</i> Halaman <i>Edit Grade Trader</i> .....	113
Gambar 118 <i>Screenshot</i> Halaman <i>Print Grade Trader</i> .....	114
Gambar 119 <i>Screenshot</i> Halaman <i>Laporan Reward BC</i> .....	115
Gambar 120 <i>Screenshot</i> Halaman <i>Print Laporan Reward BC</i> .....	116
Gambar 121 <i>Screenshot</i> Halaman <i>Laporan Reward Trader</i> .....	116
Gambar 122 <i>Screenshot</i> Halaman <i>Print Laporan Reward Trader</i> .....	117
Gambar 123 <i>Screenshot</i> Halaman <i>Laporan Transaksi</i> .....	117
Gambar 124 <i>Screenshot</i> Tampilan Halaman <i>Print Komisi Per Nama Atasan</i> .....	118

Gambar 125 <i>Screenshot</i> Tampilan Halaman <i>Print</i> Kegiatan Per Nama Atasan.....	119
Gambar 126 <i>Screenshot</i> Tampilan Halaman <i>Print</i> Komisi Per Nama <i>Employee</i> .....	119
Gambar 127 <i>Screenshot</i> Tampilan Halaman <i>Print</i> Kegiatan Per Nama <i>Employee</i> .....	120
Gambar 128 <i>Screenshot</i> Tampilan Halaman <i>Print</i> Komisi Per Periode .....	120
Gambar 129 <i>Screenshot</i> Tampilan Halaman <i>Print</i> Kegiatan Per Periode..	121

## DAFTAR TABEL

Table I Kamus Data <i>User</i> .....	39
Table II Kamus Data <i>Employee</i> .....	40
Table III Kamus Data <i>Account</i> .....	40
Table IV Kamus Data Kegiatan.....	41
Table V Kamus Data Komisi .....	41
Table VI Kamus Data Komisi_det .....	42
Table VII Kamus Data <i>Grade BC</i> .....	42
Table VIII Kamus Data <i>Grade Trader</i> .....	43
Table IX Kamus Data <i>Reward BC</i> .....	43
Table X Kamus Data <i>Reward Trader</i> .....	43
Table XI Kamus Data <i>Type Account</i> .....	44
Table XII Kamus Data Komisi Per Lot.....	44
Table XIII PSPEC Proses <i>Login</i> .....	44
Table XIV PSPEC Proses Validasi <i>Login</i> .....	45
Table XV PSPEC Proses <i>Add Employee</i> .....	45
Table XVI PSPEC Proses <i>Edit Employee</i> .....	45
Table XVII PSPEC Proses <i>Delete Employee</i> .....	46
Table XVIII PSPEC Proses <i>Search Employee</i> .....	47
Table XIX PSPEC Proses <i>Print Employee</i> .....	47
Table XX PSPEC Proses <i>Add Account</i> .....	47
Table XXI PSPEC Proses <i>Edit Account</i> .....	48
Table XXII PSPEC Proses <i>Delete Account</i> .....	48
Table XXIII PSPEC Proses <i>Search Account</i> .....	49
Table XXIV PSPEC Proses <i>Print Account</i> .....	49
Table XXV PSPEC Proses <i>Add Komisi</i> .....	49
Table XXVI PSPEC Proses <i>Delete Komisi</i> .....	50
Table XXVII PSPEC Proses <i>Print Komisi</i> .....	50
Table XXVIII PSPEC Proses <i>Search Komisi</i> .....	51
Table XXIX PSPEC Proses <i>Add User</i> .....	51

Table XXX PSPEC <i>Delete User</i> .....	52
Table XXXI PSPEC <i>Change Password</i> .....	52
Table XXXII PSPEC Proses Validasi <i>Change Password</i> .....	53
Table XXXIII PSPEC Proses <i>Add Kegiatan</i> .....	53
Table XXXIV PSPEC Proses <i>Edit Kegiatan</i> .....	53
Table XXXV PSPEC Proses <i>Delete Kegiatan</i> .....	54
Table XXXVI PSPEC Proses <i>Search Kegiatan</i> .....	54
Table XXXVII PSPEC Proses <i>Print Kegiatan</i> .....	55
Table XXXVIII PSPEC Proses <i>Add Grade Business Consultant</i> .....	55
Table XXXIX PSPEC Proses <i>Edit Grade Business Consultant</i> .....	56
Table XL PSPEC Proses <i>Delete Grade Business Consultant</i> .....	56
Table XLI PSPEC Proses <i>Print Grade Business Consultant</i> .....	57
Table XLII PSPEC Proses <i>Add Grade Trader</i> .....	57
Table XLIII PSPEC Proses <i>Edit Grade Trader</i> .....	57
Table XLIV PSPEC Proses <i>Delete Grade Trader</i> .....	58
Table XLV PSPEC Proses <i>Print Grade Trader</i> .....	58
Table XLVI PSPEC Proses <i>Add Reward Business Consultant</i> .....	59
Table XLVII PSPEC Proses <i>Delete Reward Business Consultant</i> .....	59
Table XLVIII PSPEC Proses <i>Print Reward Business Consultant</i> .....	59
Table XLIX PSPEC Proses <i>Add Reward Trader</i> .....	60
Table L PSPEC <i>Delete Reward Trader</i> .....	60
Table LI PSPEC <i>Print Reward Trader</i> .....	61
Table LII PSPEC <i>Add Type Account</i> .....	61
Table LIII PSPEC <i>Delete Type Account</i> .....	61
Table LIV PSPEC <i>Add Komisi Per Lot</i> .....	62
Table LV PSPEC <i>Edit Komisi Per Lot</i> .....	62
Table LVI PSPEC <i>Delete Komisi Per Lot</i> .....	63
Table LVII PSPEC <i>Search Komisi Per Lor</i> .....	63
Table LVIII PSPEC <i>Print Komisi Per Lor</i> .....	64