

FUNCTION POINT

1.Count # of biz functions per category

External inputs:

- Create company contact (because it takes information and changes state of the structure)
- Update company contact (because it takes information and changes state of the structure)
- Delete company contact (because it takes information and changes state of the structure)
- Packet sent (because the related information for packet sent is entered via locator application. That means the function is managed by the application itself)
- Phone contact completed (because the related information for packet sent is entered via locator application. That means the function is managed by the application itself)

External outputs:

- Retrieve company contact (because it just displays the results without changing of the state)

External enquiry

- None. There is no query related to the system in case study

External Interface File:

- Error file. (because it is externally maintained. That means the application does not monitor this file.

Internal Logical File:

- Company contact data. (because it is monitored by the application itself and it is kind of table)

2. Establish Complexity Factor for each and apply

The table in slides (projectmanagement1-FP_slides in slide no:29) is used for estimating complexity scores (simple, average, complex).

Function	#files	#record types	#data elements	Total	Complexity
Create company contact	2		10	4	Average
Update company contact	2		10	4	Average
Delete company contact	2		2	3	Simple
Packet sent	2		3	3	Simple
Phone contact completed	2		4	3	Simple
Retrieve company contact	2		13	4	Average
Error file		1	4	2	Simple
Company contact data		3	13	3	Simple

- Our approach is that all transactions touch the files that are company contact data and error file in a way that error file may change due to these transactions, so error file should be included for #files.
- Create and Update company contact has 10 data elements that are company, name of contact, job title, date of initial contact, street address, city, state, zip code, phone number, fax number.
- Delete company contact has 2 data elements that are company and name of contact.

- Packet sent has 3 data elements that are company, name of contact and the date the packet was sent.
- Phone contact completed has 4 data elements that are company, name of contact, date of phone contact and notes.
- Retrieve company contact has 13 data elements that are company, name of contact, job title, date of initial contact, street address, city, state, zip code, phone number, fax number, date packet sent, date of phone contact and notes.
- Our assumption is that all 4 fields should be filled for each entry, so #record type is 1 for error file. Moreover, error file's #data elements is 4 because case study says that it has four fields.
- #record types of company contact data is 3. The first one is that first company contact data with 10 fields. The second one is that when an information packet is sent, company, name of contact and the date packet sent should be entered. The third one is that after phone contact, company, name of contact, data of phone and notes should be entered. Moreover, company contact data has 13 data elements that are company, name of contact, job title, date of initial contact, street address, city, state, zip code, phone number, fax number, date packet sent, date of phone contact and notes.

We continue with only complexity scores (simple and average).

Count the number of each item and multiply by its weight factor.

	Simple	Average	Complex
External input	3	4	6
External output	4	5	7
External enquiry	3	4	6
Internal file	7	10	15
External interface	5	7	10

Function	Type	Complexity	Score
Create company contact	External Input	Average	4
Update company contact	External Input	Average	4
Delete company contact	External Input	Simple	3
Packet sent	External Input	Simple	3
Phone contact completed	External Input	Simple	3
Retrieve company contact	External Output	Average	5
Error file	External Interface	Simple	5
Company contact data	Internal File	Simple	7

Total = 34. It is an unadjusted Function Point.

3. Compute an “influence multiplier” and apply

Influence Factors	DI	Comment
Data communications	3	Online data collection
Distributed functions	2	Data transfer online
Performance objectives	2	Phone call should made within 2 weeks
Heavily used configuration	2	Will run on existing system
Transaction rate	2	No requirements but it should be enough to complete transactions.
On-line data entry	5	There are online entry transactions
End-user efficiency	2	No applicable
On-line update	5	There is transaction for update
Complex processing	0	No complex issue
Reusability	0	No special requirements
Installation ease	0	No special requirements
Operational ease	3	It is important for employees
Multiple sites	0	No special requirements
Facilitate change	0	No special requirements

TDI (Total Degree of Influence) = 26

VAF (Value Adjustment Factor) = $0.65 + (0.01 * \text{TDI}) = 0.65 + (0.01 * 26) = 0.91$

FP (Function Point) = VAF * unadjusted Function Point = $0.91 * 34 = 30.94$

4. Results in “function point total”