Advantages of function point analysis.

a. It can be applied early in the software development life cycle.  
b. It is independent of the programming language, technology, techniques.  
c. It provides a reliable relationship to effort.  
d. Creation of more function points can define productivity goal as opposed to LOC.  
e. Productivity of projects written in different languages can be measured.  
f. They can be counted early and often.  
g. They can be used for GUI systems.  
h. It considers environmental factors.

Disadvantages of function point analysis.

1. It needs subjective evaluations with a lot of judgement involved.  
2. Many effort and cost models are based on LOC, so function points need to be converted.  
3. Less research data is available on function points as compared to LOC.  
4. It is performed after creation of design specifications.  
5. It has low accuracy of evaluating as a subjective judgement is involved.  
6. As the learning curve is quite long its not easy to gain proficiency.  
7. It is a time-consuming method.

**External Inputs (EI)** - is an elementary process in which data crosses the boundary from outside to inside.  This data may come from a data input screen or another application. The data may be used to maintain one or more internal logical files.  The data can be either control information or business information.  If the data is control information it does not have to update an internal logical file.

**External Outputs (EO)** - an elementary process in which derived data passes across the boundary from inside to outside.   Additionally, an EO may update an ILF.  The data creates reports or output files sent to other applications.  These reports and files are created from one or more internal logical files and external interface file.

**External Inquiry (EQ)**- an elementary process with both input and output components that result in data retrieval from one or more internal logical files and external interface files.  The input process does not update any Internal Logical Files, and the output side does not contain derived data.

**Internal Logical Files (ILF’s)**- a user identifiable group of logically related data that resides entirely within the applications boundary and is maintained through external inputs.

**External Interface Files (EIF’s)** - a user identifiable group of logically related data that is used for reference purposes only. The data resides entirely outside the application and is maintained by another application. The external interface file is an internal logical file for another application.

**Risk-** Risk is an expectation of loss, a potential problem that may or may not occur in the future.

Risk Management comprises of following processes:

Software Risk Identification

Software Risk Analysis

Software Risk Planning

Software Risk Monitoring

<https://www.test-institute.org/What_Is_Software_Risk_And_Software_Risk_Management.php>

