# Cash Flow Analysis

Act. Bernardo Mondragon Brozon

January 16, 2019

#### Assumptions

The cash flow analysis will consist of computing the present value of the future revenue of all projects that the company will generate in the following 10 years with the following assumptions:

- Risk free annual effective interest rate of Mexican economy: 0.08.
- Sustained price annual increment ratio of technology: -0.02.

The company will work on 5 types of projects at the same time:

- 1. Landing pages,
- 2. Small projects,
- 3. Medium projects,
- 4. Large projects, and
- 5. Inhouse projects.

Each type of project will arrive to the company according a Poisson point process with a given ratio  $\lambda$  per year.

## Landing pages

Landing pages will arrive to the company with a ratio of 24 per year and will consider the following assumptions:

- The price of a landing page will be \$10<sup>4</sup>.00 MNX in average with a standar deviation of \$2000.00 MNX.
- The average development time of a landing page will be 1 month.
- $1 \times 100$  percent of the project will be charged in advance.

### Small projects

Small projects will arrive to the company with a ratio of 5 per year and will consider the following assumptions:

- The price of a small project will be  $5 \times 10^4.00$  MNX in average with a standar deviation of  $2 \times 10^4.00$  MNX.
- The average development time of a small project will be 4 months.
- $0.25 \times 100$  percent of the project will be charged in advance.
- 0.5 × 100 percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- 0.05 × 100 percent of the total price will be charged monthly for project maintenance.

#### Medium projects

Medium projects will arrive to the company with a ratio of 2 per year and will consider the following assumptions:

- The price of a medium project will be  $\$2 \times 10^5.00$  MNX in average with a standar deviation of  $\$10^5.00$  MNX .
- The average development time of a medium project will be 7.
- $0.25 \times 100$  percent of the project will be charged in advance.
- $0.5 \times 100$  percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- 0.05 × 100 percent of the total price will be charged monthly for project maintenance.

### Large projects

Large projects will arrive to the company with a ratio of 1 per year and will consider the following assumptions:

- The price of a large project will be  $$1.6 \times 10^6.00$  MNX in average with a standar deviation of  $$2 \times 10^5.00$  MNX.
- The average development time of a large project will be 12.
- $0.25 \times 100$  percent of the project will be charged in advance.
- 0.5 × 100 percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- 0.05 × 100 percent of the total price will be charged monthly for project maintenance.

# Inhouse projects

Large projects will arrive to the company with a ratio of 3 per year and will consider the following assumptions:

- The average development time of a project will be 14. months.
- The revenue generated by an inhouse project will be  $$4 \times 10^5.00$  MNX in average with an standard deviation of \$10<sup>5</sup>.00 MNX.

#### Valuation

Considering the previous assumptions the company's value is \$676,060,485.00 MNX.