

# Cash Flow Analysis

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## 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 making the following assumptions:

- Risk free annual effective interest rate of Mexican economy: 0.1.
- 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. Large projects,
4. Enterprise projects, and
5. Inhouse projects.

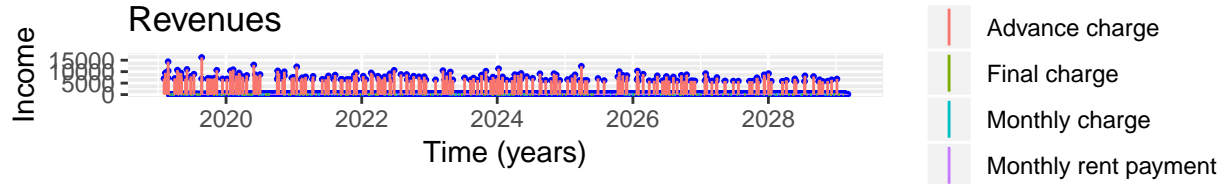
Each type of project will arrive to the company according to a Poisson point process with a given ratio  $\lambda$  per year. In other words, the company will arrange contracts with frequency in such a way that it will have development start points randomly distributed in the timeline with a given average. For example, we will consider that the company will develop an average of  $\lambda = 24$  landing pages in a year (two each month). We will make these kind of assumptions for each type of project the company wants to develop and the average of contracts in a year will depend on the size of the project.

## 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 \$10000.00 MXN in average with a standard deviation of \$2000.00 MXN.
- The average development time of a landing page will be 1 month.
- $1 \times 100$  percent of the project will be charged in advance.

The positive cash flows that the company will obtain during the following 10 years due to landing pages development will look similar to the following graph:



Project arrivals to the company will look like the following graph:

### Project arrivals



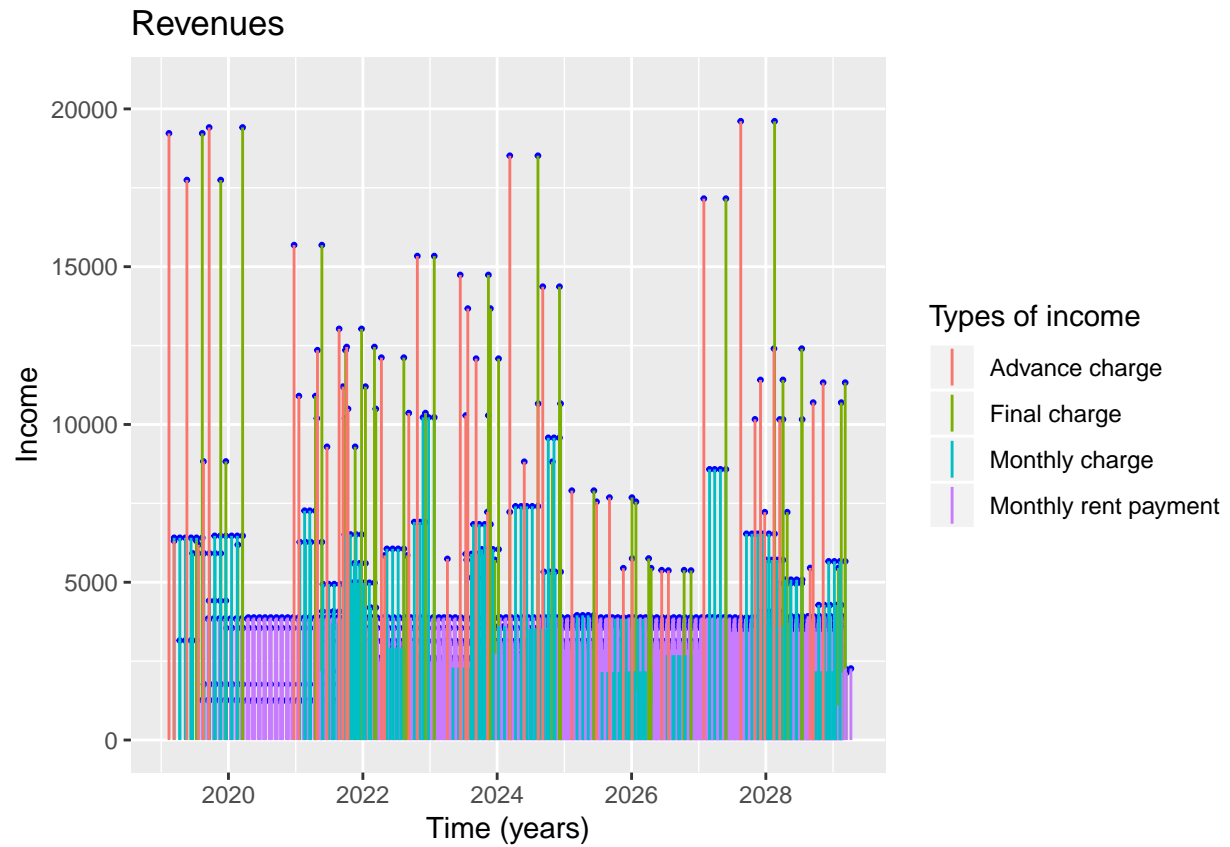
Given the previous future cash flows, the present value of lading pages development revenues is worth \$'r'.00 MNX.

## Small projects

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

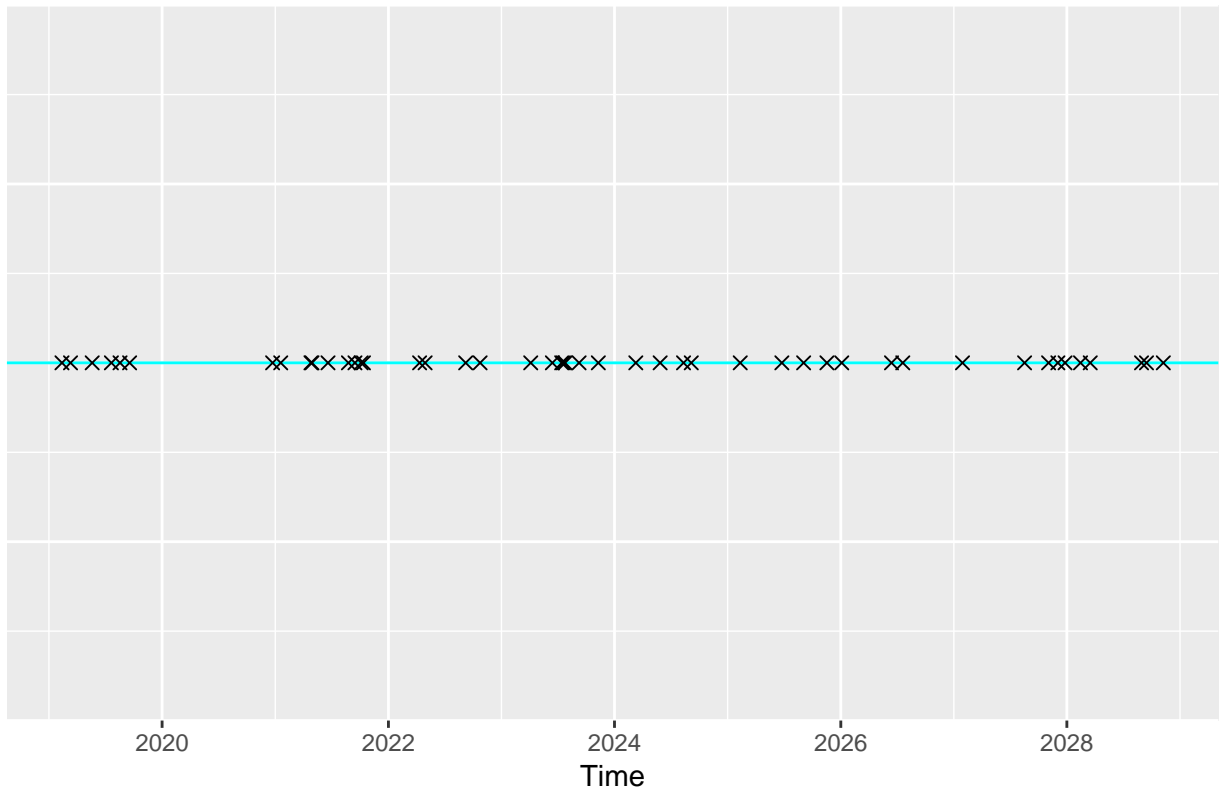
- The price of a small project will be \$50000.00 MNX in average with a standar deviation of \$20000.00 MNX.
- The average development time of a small project will be 4 months.
- $0.25 \times 100$  percent of the project will be charged in advance.
- $0.5 \times 100$  percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- $0.05 \times 100$  percent of the total price will be charged monthly for project maintenance.

The positive cash flows that the company will obtain during the following 10 years due to small projects development will look similar to the following graph:



Project arrivals to the company will look like the following graph:

## Project arrivals



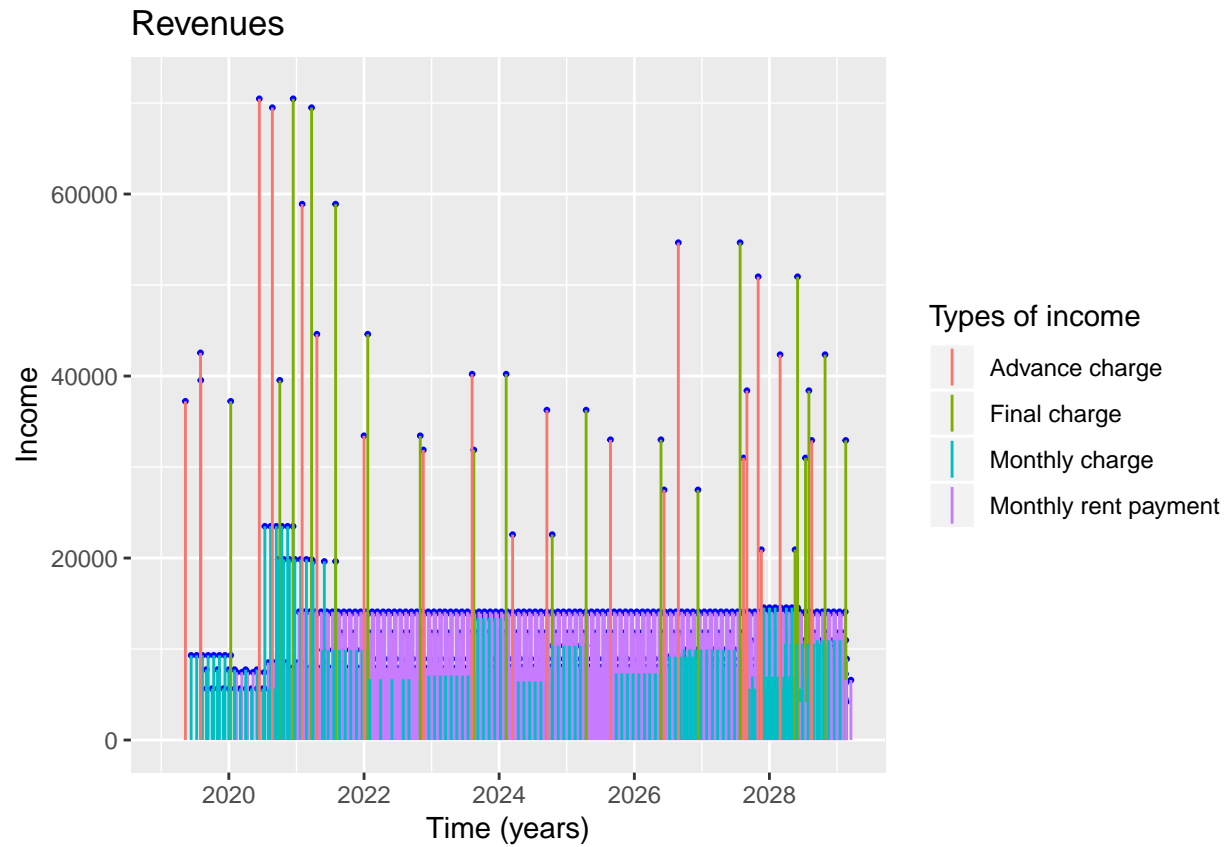
Given the previous future cash flows, the present value of small projects development revenues is worth \$4.00 MNX.

## Large projects

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

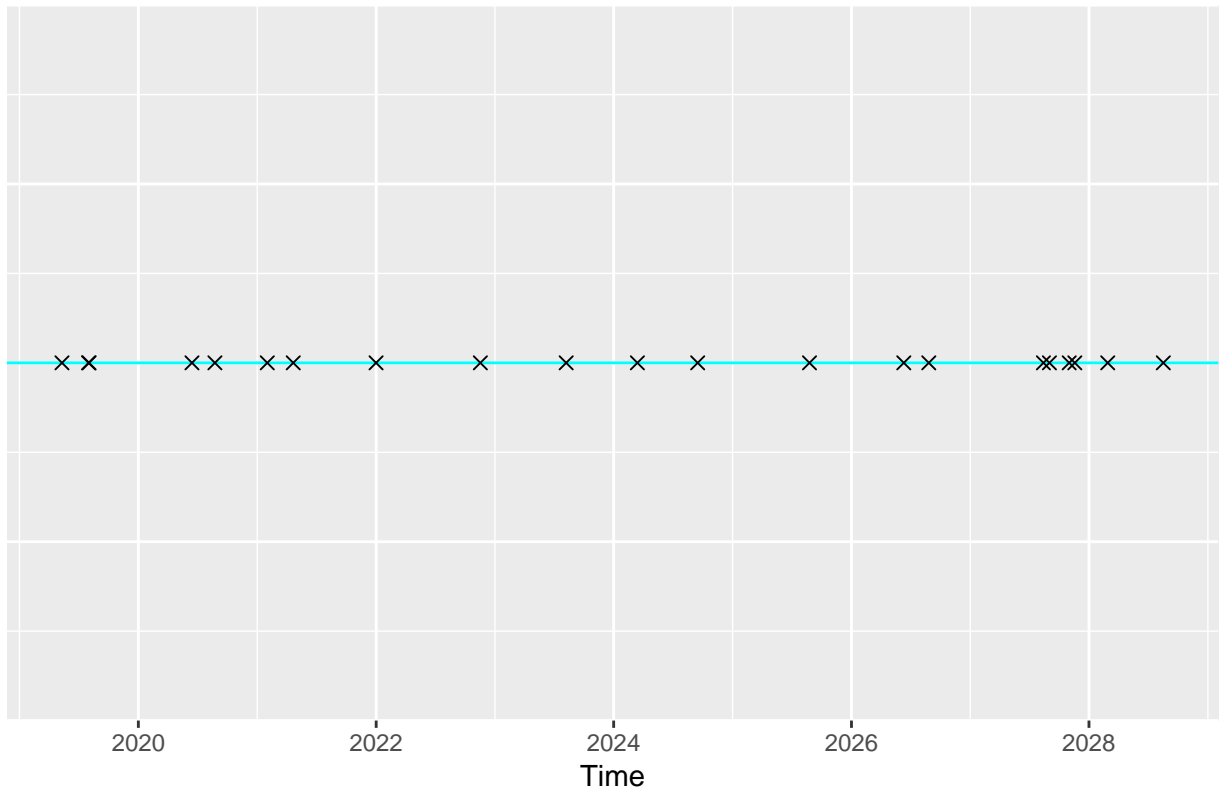
- The price of a large project will be \$200000.00 MNX in average with a standar deviation of \$70000.00 MNX .
- The average development time of a large project will be 7 months.
- $0.25 \times 100$  percent of the project will be charged in advance.
- $0.5 \times 100$  percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- $0.05 \times 100$  percent of the total price will be charged monthly for project maintenance.

The positive cash flows that the company will obtain during the following 10 years due to large projects development will look similar to the following graph:



Project arrivals to the company will look like the following graph:

## Project arrivals



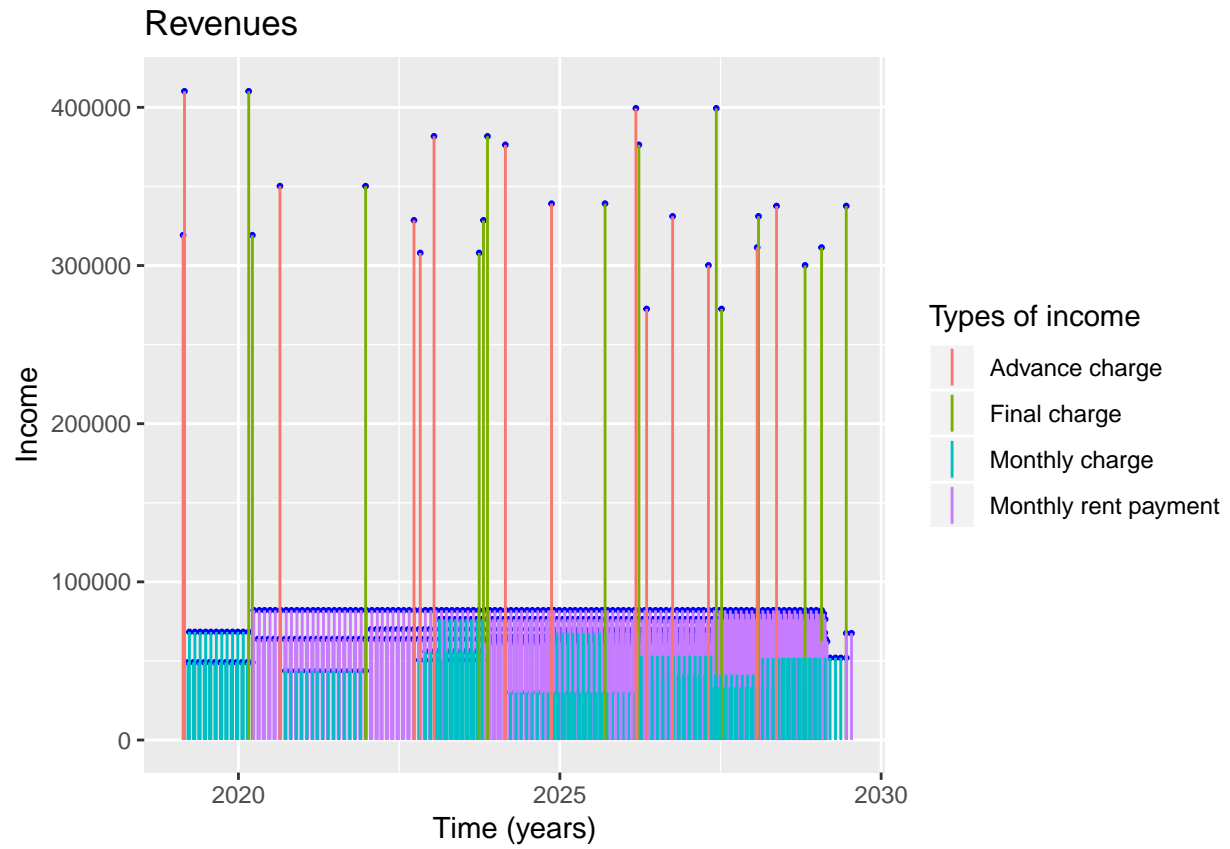
Given the previous future cash flows, the present value of large projects development revenues is worth \$74.00 MNX.

## Enterprise projects

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

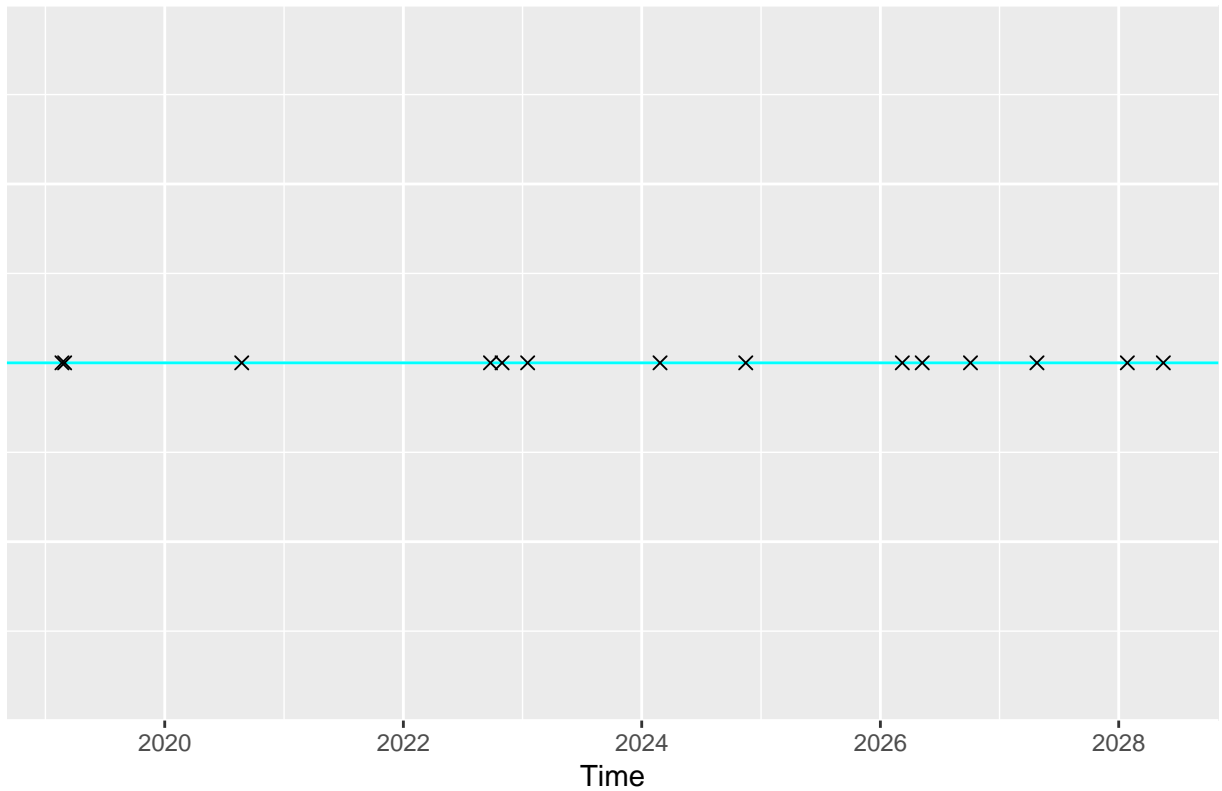
- The price of an enterprise project will be \$1600000.00 MNX in average with a standar deviation of \$200000.00 MNX.
- The average development time of an enterprise project will be 13 months.
- $0.25 \times 100$  percent of the project will be charged in advance.
- $0.5 \times 100$  percent of the project will be charged monthly during the development.
- $0.25 \times 100$  percent of the project will be charged when the project is finished.
- $0.05 \times 100$  percent of the total price will be charged monthly for project maintenance.

The positive cash flows that the company will obtain during the following 10 years due to enterprise projects development will look similar to the following graph:



Project arrivals to the company will look like the following graph:

## Project arrivals



Given the previous future cash flows, the present value of enterprise projects development revenues is worth \$4.00 MNX.

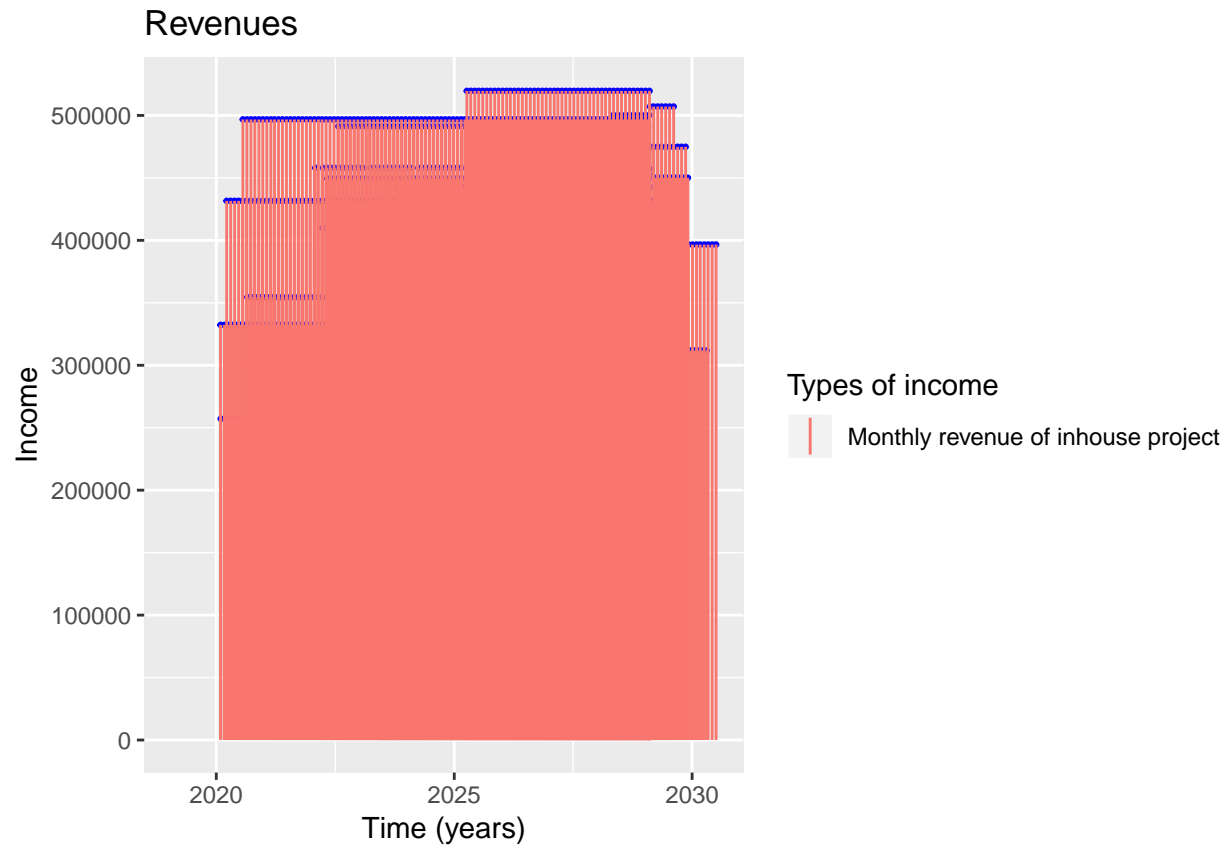
## Inhouse projects

Inhouse projects will arrive to the company with a ratio of 5 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 \$400000.00 MNX in average with an standard deviation of \$100000.00 MNX.

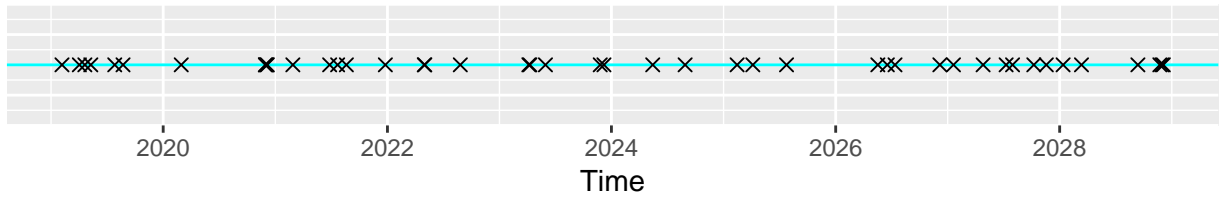
The positive cash flows that the company will obtain during the following 10 years due to inhouse projects development will look similar to the following graph:





Project arrivals to the company will look like the following graph:

## Project arrivals



Given the previous future cash flows, the present value of inhouse projects development revenues is worth \$'r'.00 MNX.

## Valuation

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