

Lab 7

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RUDN University, 26 March, 2021 Moscow, Russian Federation

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- Yakushevich Artem Urievich
- Since 2018, I have been studying at RUDN University in the specialty Mathematics and Computer Science.

Why do Lab 7?

- This model allows you to simulate the behavior of advertising distribution with different input data.
- This model is used by experts to competently attract the audience to the product and analyze the growth of users.
- This is a useful skill for any entrepreneur in business. So you can assess the risks and opportunities of your business.

The purpose of the laboratory work

consider the advertising effectiveness model.

Laboratory tasks

1. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.62 + 0.000023n(t))(N - n(t)).$$

2. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.000024 + 0.4n(t))(N - n(t)).$$

3. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.5t + 0.5n(t))(N - n(t)).$$

4. Determine at what point in time the speed of advertising distribution will have the maximum value.
5. Answer questions for laboratory work.

Results of the laboratory work

:

1. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.62 + 0.000023n(t))(N - n(t)).$$

2. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.000024 + 0.4n(t))(N - n(t)).$$

3. Build a schedule of advertising distribution, the mathematical model of which is described by the following equation:

$$\frac{dn}{dt} = (0.5t + 0.5n(t))(N - n(t)).$$

- to determine at what point in time the speed of advertising distribution will have the maximum value.

As a result of the seventh laboratory work, I examined the advertising effectiveness model.

