

## 1.1 Example of calculation of the Net Present Value (NPV) – the first of the methods

Input values:

- total investment value in CZK (I): I = CZK 235.600
- Cash-Flow on 1,800 flowers sold in the online store in CZK (CF): CF = 192.000
- planned service life (N): N = 4 years
- minimum required rate of return on investment ( $i_{VK}$ ):  $i_{VK} = 5\%$

The net present value of investment in CZK will be determined as follows:

$$\check{C}SH = \left( \frac{192.000}{(1 + 0,05)^1} + \dots + \frac{192.000}{(1 + 0,05)^4} \right) - 235.600 = 445.223$$

The net present value of investment after four years under the planned conditions will be CZK 627,184. It is clear that the investment in the information system is advantageous for the company (the condition of  $NPV > 0$  was met).

The problem of the application of NPV calculations within business IT is the need to determine the value of Cash Flow that will flow in the individual years of the life of the investment. Another issue that needs to be considered in the calculations is the required rate of return on investment. This value should change depending on the development of the market environment. Let's assume a case where a return of 4%, for example, could be considered very interesting in 200X due to the very low interest rates on the banking market. On the other hand, in the following year, when the central bank raised interest rates by two percentage points due to inflation, the previously profitable return does not even cover the increase in inflation. With this example, we wanted to demonstrate not only the complexity of the Cash-Flow estimate, but also the significant risks in estimating the development of the market environment.