

## Modul 6

# NETPRESENTVALUE-FORMEL ERSTELLEN

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**Hier erstellen wir die Finanz-Formel NETPRESENTVALUE**

**Du musst für diese Formel mit der MyVariable-Bibliothek  
arbeiten**

**Für diese Formel benötigen wir 5 My Variable, die wir selber  
definieren**

## Wir erstellen die Formeln: - NETPRESENTVALUE

Bei dieser Formel definieren wir vorgängig die MyVariables

1. Investition **Acquisitionexpense**
2. Number of Period **aper**
3. Interest rate per year **Ir1**
4. Period yield **Payout** und
5. Percent rate **percent**

**Block 1:**  
Formelname

**Block 2:**  
Editor + Rechner

**Block 3:**  
Variablen und  
Rechts  
Ergebnisse

<b>NAME</b>	<b>NETPRESENTVALUE</b>	<b>DESCRIPTION</b>	Netpresentvalue
<b>Category</b>	Banking and Finance	<b>Subcategory</b>	Interest calculation

Totalinvestment= Acquisitionexpense

FOR (i, 1, aper) {discountfactor (i) = 1 / (1 + Ir1) \*\* i  
 Netpresentvalue(i) = Payout \* discountfactor  
 Earningsvalue(i) = Netpresentvalue(i) + Earningsvalue(i-1) + Netpresentvalue (-2)}

Profitloss = Earningsvalue(aper) - Acquisitionexpense

Discounted\_Yield = Earningsvalue  
 Totalprofit = Profitloss  
 Profit = Totalprofit / Discounted\_Yield \* percent  
 ReceivedPayout = aper \* Payout

SHOW (Totalinvestment;Discounted\_Yield;Totalprofit;Profit;ReceivedPayout)

Show Errors	<input checked="" type="checkbox"/>	Significant numbers	<input type="text" value="2"/>
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Acquisitionexpense	Investment for project	<input type="text" value="225000"/>		Totalinvestment	225 000.00
aper	Number of Period	<input type="text" value="24"/>		Discounted_Yield	309 363.52
Ir1	Interest rate per year	<input type="text" value="0.0125"/>		Totalprofit	84 363.52
Payout	Period yield	<input type="text" value="15000"/>		Profit	27 %
percent	Percent rate	<input type="text" value="100"/> %		ReceivedPayout	360 000.00

Calculate
Save
Back
Graph
Create MyVariable

Die MyVariables werden über  
im Editor generiert

**Create MyVariable** Button

Button

## Variables used by NETPRESENTVALUE

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Name	Description	Format	Unit	By default	Category	Subcategory
percent	Percent rate	numeric	%	100	Banking and Finance	all Subcategories
Payout	Period yield	numeric		15000	Banking and Finance	Interest calculation
Ir1	Interest rate per year	numeric		0.0125	Banking and Finance	all Subcategories
aper	Number of Period	numeric		24	Banking and Finance	all Subcategories
Acquisitionexpense	Investment for project	numeric		225000	Banking and Finance	all Subcategories

### Variable: Acquisitionexpense

**Data**

Category: Banking and Finance

Subcategory: all Subcategories

Name: Enter variable name manually  
Acquisitionexpense

Format: numeric

Code: No

Default value: 225000

Constant value: No

### Variable: aper

**Data**

Category: Banking and Finance

Subcategory: all Subcategories

Name: Enter variable name manually  
aper

Description: Number of Period

Informations (Optional):

Tables:

Unit definition: This variable has no unit

Format: numeric

Code: No

Default value: 24

Constant value: No

### Variable: Ir1

**Data**

Category: Banking and Finance

Subcategory: all

Name: Enter variable name manually  
Ir1

Format: numeric

Code: No

Default value: 0.0125

Constant value: No

### Variable: Payout

**Data**

Category: Banking and Finance

Subcategory: Interest calculation

Name: Enter variable name manually

Description: Period yield

Informations (Optional):

Tables:

Unit definition: This variable has no unit

### Variable: percent

**Data**

Category: Banking and Finance

Subcategory: all Subcategories

Name: Enter variable name manually  
percent

Format: numeric

Code: No

Default value: 100

Constant value: No

Description: Percent rate

Informations (Optional):

Tables:

Unit definition: Enter unit manually

Unit: %

Dimension: One

Quantity: Percent

## NETPRESENTVALUE-Formel erstellen

### Block 1: Definition der Formel

**My Formulas/Create** drücken: ein leerer Editor erscheint.

Name: **NETPRESENTVALUE** und Description: **Netpresentvalue** eingeben

**Category: Banking and Finance** und **Subcategory: Interest calculation** eingeben.

Mit der Eingabe von Category und Subcategory haben wir definiert, mit welchen 5 Variablen wir arbeiten müssen.

**Block 2:** Nachdem die 5 MyVariabel (s. Seite 3) definiert sind, kann die nachfolgende Formel in den Editor eingeben. Good luck!

Totalinvestition= Acquisitionexpense

FOR (i, 1, aper) {discountfactor (i) = 1 / (1 + lr1) \*\* i

Netpresentvalue(i) = Payout \* discountfactor

Earningsvalue(i) = Netpresentvalue(i) + Earningsvalue(i-1) + Netpresentvalue (-2)}

Profitloss = Earningsvalue(aper) - Acquisitionexpense

Discounted\_Yield = Earningsvalue

Totalprofit = Profitloss

Profit = Totalprofit / Discounted\_Yield \* percent

ReceivedPayout = aper \* Payout

SHOW (Totalinvestition;Discounted\_Yield;Totalprofit;Profit;ReceivedPayout)

Taste **Calculate** drücken

**Block 3: Variablen (links) und Ergebnisse (rechts) anzeigen:**

Show Errors	<input checked="" type="checkbox"/>	Significant numbers	<input type="text" value="2"/>	
Acquisitionexpense	Investment for project	<input type="text" value="225000"/>	Totalinvestition	225 000.00
aper	Number of Period	<input type="text" value="24"/>	Discounted_Yield	309 363.52
Ir1	Interest rate per year	<input type="text" value="0.0125"/>	Totalprofit	84 363.52
Payout	Period yield	<input type="text" value="15000"/>	Profit	27 % <input type="text" value="v"/>
percent	Percent rate	<input type="text" value="100"/> % <input type="text" value="v"/>	ReceivedPayout	360 000.00

Calculate

Save

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Create MyVariable