

**Fig. 88: Entering the data**

45	Nº de	fecha de la	fecha del	costos de	valor	vida	vida útil	depreciación	interés	periodo	Vida		
46	sujepto	compra	dejando	adquisición	revisado	útil	revisada	interna (més)	interno (més)	de uso	de uso	restante	dejando
47	41A	05/11/12		1.234,00	65,00	60	90	5,00	0,24	78	13	0,00	
48	42B	09/05/13	20/03/19	1.334,00	0,00	72	72	0,00	0,00	71	2	37,00	37,00
49	43C	10/11/13		1.434,00	400,00	84	90	16,00	1,50	66	25	324,00	
50	44D	14/05/14		1.534,00	600,00	96	102	13,95	2,25	60	43	591,00	
51	45E	15/11/14		1.634,00	832,00	108	108	15,13	3,11	54	55	832,00	
52	46F	19/05/15		1.734,00	1.055,00	120	120	14,45	3,95	48	73	1.055,00	
53	47G	20/11/15		1.834,00	1.264,00	132	132	13,89	4,73	42	91	1.264,00	
54	48H	23/05/16		1.934,00	1.464,00	144	144	13,43	5,48	36	109	1.464,00	
55	49I	24/11/16		2.034,00	1.655,00	156	156	13,04	6,20	30	127	1.655,00	
56				14.706,00	7.336,00			104,89	27,45			7.223,00	37,00

(Source: download file - There is only a Spanish version.)

In a second part of the table, the data of the asset level are then calculated automatically. Reliably the book values from the table of the earlier period must be transferred to the column "ultimo" and the evaluation date must be entered in the heading of the column "valor contable".

**Fig. 89: Evaluation**

105	Nº de	costos de adquisición totales				depreciación acumulada			valor contable		
106	sujepto	ultimo	acceso	dejando	actual	ultimo	acceso	dejando	actual	30/04/19	ultimo
107	41A	1.234,00			1.234,00	1.234,00			1.234,00	0,00	0,00
108	42B	1.334,00			0,00	1.093,00	204,00	1.297,00	0,00	0,00	241,00
109	43C	1.434,00		1.334,00	1.434,00	905,00	205,00		1.110,00	324,00	529,00
110	44D	1.534,00			1.534,00	751,00	192,00		943,00	591,00	783,00
111	45E	1.634,00			1.634,00	620,00	182,00		802,00	832,00	1.014,00
112	46F	1.734,00			1.734,00	506,00	173,00		679,00	1.055,00	1.228,00
113	47G	1.834,00			1.834,00	403,00	167,00		570,00	1.264,00	1.451,00
114	48H	1.934,00			1.934,00	309,00	161,00		470,00	1.464,00	1.625,00
115	49I	0,00	2.034,00		2.034,00	2.034,00	378,00		378,00	1.656,00	
116	Grupo 4	12.672,00	2.034,00	1.334,00	13.372,00	7.855,00	1.662,00	1.297,00	6.186,00	7.186,00	6.851,00
117											
118											
119											
120		costos de adquisición totales				depreciación acumulada			valor contable		
121		ultimo	acceso	dejando	actual	ultimo	acceso	dejando	actual	30/04/19	ultimo
122	Grupo 1	12.672,00	2.034,00	1.334,00	13.372,00	7.855,00	1.662,00	1.297,00	6.186,00	7.186,00	6.851,00
123	Grupo 2	12.672,00	2.034,00	1.334,00	13.372,00	7.855,00	1.662,00	1.297,00	6.186,00	7.186,00	6.851,00
124	Grupo 3	12.672,00	2.034,00	1.334,00	13.372,00	7.855,00	1.662,00	1.297,00	6.186,00	7.186,00	6.851,00
125	Grupo 4	12.672,00	2.034,00	1.334,00	13.372,00	7.855,00	1.662,00	1.297,00	6.186,00	7.186,00	6.851,00
126	total	50.688,00	8.136,00	5.336,00	53.488,00	31.420,00	6.648,00	5.188,00	24.744,00	28.744,00	27.404,00
127											

(Source: download file - There is only a Spanish version.)

With the separation of historic cost and accumulated depreciation, the age of capital goods and the reinvestment needs of the nearest future can be estimated.

The depreciations are included in the income statement, the book values in the balance sheet.

The credits worksheet presents templates for loan repayment schedules. First, the interest rate (per year) and the term (in months) are entered in the head of the table. From this a factor is calculated for the determination of the monthly installments or the loan amount. From this a factor is calculated for the determination of the monthly installments or the loan amount. For a given amount, this is divided by the factor to determine the monthly rate. At a given rate, this is multiplied by the factor to then calculate the possible loan amount. The table below then divides each monthly installment into the interest and principal portion. The column "capital" indicates the remaining debt at the end of the period.

**Fig. 90: Repayment plans**

19	credito 1	100.000,00	interés	5,00%	credito 2	41.730,23	interés	5,00%										
20	mensual	659,96	meses	240	mensual	330,00	meses	180										
21	fecha	11/12/13	factor	151,5253131	fecha	20/10/11	factor	126,4552427										
22																		
23	més	capital	interés	reembolso	més	capital	interés	reembolso		capital	interés	reembolso						
24	0	12/13	100.000,00		0	10/11	41.730,23											
25	1	01/14	99.756,71	416,67	243,29	1	11/11	41.574,11	173,88	156,12	01/14	137.035,13	572,72	417,24				
26	2	02/14	99.512,41	415,65	244,30	2	12/11	41.417,33	173,23	156,77	02/14	136.816,15	570,98	416,98				
27	3	03/14	99.267,09	414,64	245,32	3	01/12	41.259,90	172,57	157,43	03/14	136.595,43	569,23	420,72				
28	4	04/14	99.020,74	413,61	246,34	4	02/12	41.101,62	171,92	158,08	04/14	136.372,96	567,48	422,47				
29	5	05/14	98.773,38	412,59	247,37	5	03/12	40.943,08	171,26	158,74	05/14	136.149,72	565,72	424,24				
30	6	06/14	98.524,96	411,56	248,40	6	04/12	40.783,67	170,60	159,40	06/14	135.922,72	563,95	426,00				
31	7	07/14	98.275,54	410,52	249,44	7	05/12	40.623,61	169,93	160,07	07/14	135.691,94	562,18	427,78				
32	8	08/14	98.025,07	409,48	250,47	8	06/12	40.462,87	169,27	160,73	08/14	135.458,38	560,40	429,56				
33	9	09/14	97.773,55	408,44	251,52	9	07/12	40.301,47	168,60	161,40	09/14	135.230,88	558,61	431,35				
34	10	10/14	97.520,98	407,39	252,57	10	08/12	40.139,39	167,92	162,08	10/14	135.000,88	556,81	433,15				
35	11	11/14	97.267,36	406,34	253,62	11	09/12	39.976,64	167,25	162,75	11/14	134.769,01	555,00	434,94				

(Source: download file - There is only a Spanish version.)

The respective month is defined continuously and according to the calendar. For several loans, as is in the table on the right, a total of all loans can be calculated for the respective calendar month. With this data, the interest expense and the repayment can be automatically transferred to the accounting department.

#### **6.4.4. payroll**

In discussions with small business owners, there was no willingness to cooperate on the issue of recording working time and wages. It gives the impression that this part of the company's activity should not be documented. In reality, there should be workers who should not officially exist. For their payment, there must also be revenue that does not exist officially.

Because the clarification of these backgrounds would not be productive and should also weigh heavily on the atmosphere of conversation, only a Spanish translation of a file is presented here, with which according to the German requirements for payroll accounting of personnel costs could be organized.

The file "salario.ods" has 12 worksheets for each month and one for the whole year. There, in tables for each employee, the pay slips of the individual months are provided with data. There are 8 employees. In the other 12 worksheets, on the other hand, there are payslips.

To the right of the first and second payslips of each month, there is a table with the same row order as the tables in Worksheet 2019 (for the whole year), which juxtaposes the sum for the month and the amounts for individual workers. It is also supplied with data from the worksheet for the whole year. This table is repeated for all 8 employees.

**Fig. 91: Payroll**

**Nómina**

Maestro Maximo

apellidos, nombre	A	B
departamento	C	
periodo	Noviembre	2019



sueldo sujeto a impuestos	salario		horas á		
	horas extraordinarias		horas á		
	pago de vacaciones				
	dinero de la Navidad				
	pagos especiales				
	suplementos del salario base				
	gastos de viaje				
	rendimiento de capital				
<b>Ingresos brutos</b>					- €
- libre de impuestos					
Base Imponible					- €
deducciones	impuesto				
	de nómina, clase	II	de		- €
	impuesto eclesiástico				
	recargo de solidaridad				
	contribuciones de empleados de seguro social		seguro de salud		
			seguro de desempleo		
			seguro de pensiones		
			cuidad. de enfermería		
insinuaciones					- €
sueldo libre de impuestos	suplemento para domingos, festivos y noches				
	gastos de viaje				
	gastos reembolsados				
	subsidio al ss voluntario				
	reembolso seg. alternativo				
<b>importe pagado</b>					- €

(Source: download file - There is only a Spanish version.)

**Fig. 92: Wage journal**

datos maestros		2019	Enero	Febrero	Marzo	Abril	Mayo	Junio	Julio	Agosto	Septiembre	Octubre	Noviembre	Diciembre
apellidos	A	salario cantidad	0.00											
		por hora / salario	0.00											
primer nombre	B	horas extraordinarias cantidad	0.00											
		salario por hora	0.00											
departamento	C	pago de vacaciones dinero de la Navidad	0.00											
		pagos especiales	0.00											
clase de impuestos		suplementos del salario base	0.00											
	II	gastos de viaje	0.00											
fecha de nacimiento		rendimiento de capital	0.00											
Número de identificación fiscal		Ingresos brutos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		- libre de impuestos	0.00											
		Base imponible	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		impuestos de nómina	0.00											
		impuesto eclesiástico	0.00											
		recargo de solidaridad	0.00											
		<b>contribuciones de empleados</b>												
		seguro de salud (sa)	0.00											
		seguro de desempleo (sd)	0.00											
		seguro de pensiones (sp)	0.00											
		cuidad. de enfermería (ce)	0.00											
		insuaniaciones	0.00											
		suplem. para domingos, festivos y noches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		gastos de viaje	0.00											
		gastos reembolsados	0.00											
		subsidio al seguro de salud voluntario	0.00											
		reembolso seg. alternativo	0.00											
		<b>importe pagado</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		<b>contribuciones del empleador (ce)</b>												
		sa - ce / subsidio sa	0.00											
		sp - ce	0.00											
		sd - ce / imp. micro-empleo	0.00											
		ce - ce / subsidio ce	0.00											
		cargo 1	0.00											
		cargo 2	0.00											
		cargo por quiebra	0.00											
		bruto sujeto de sds/tp	0.00											
		bruto sujeto de sds/ce	0.00											
		Cont. a fondo de pensión	0.00											
		Sujeto al seguro social	0.00											
		Cuenta de empleados total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		importe pagado	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		contribución cámara	0.00											
		Impuestos totales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		contrib. sociales totales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Source: download file - There is only a Spanish version.)

The fields for the individual months only contain summary formulas. However, it is not problematic, e.g. Insert a column with a percentage contribution rate before the totals column and enter a formula in the Social Security fields. On these then very German calculations should be omitted at this point. In the fields for the number of hours worked could be branched to a statistic.

There are many more options for extending this file.

### 6.4.5. bank statements

The small business owners first observe the cash flows. Therefore, here is a table to be presented, with which an original cash flow statement can be created from the bank accounts according to the direct method.

First, the amounts with the date of payment are transferred to a table in the worksheet "entrada", with deposits and withdrawals in two separate columns. This can also be done by means of data import. In the column "balance" the current account balance is calculated. As with incoming invoices, the payments are assigned with a letter to the different payment streams. In addition, a comment can be deposited. Most payments will be allocated to groups A (de clientes) and B (a proveedores). For investments, group M can also be defined. With them, the invoice no. detected. The allocation to the cash flows already results in a separation into incoming and outgoing invoices.

**Fig. 93: Allocation of payments**

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	C
2	pos	fecha	factura								Banco 1	Banco 2	caja	total	
3	no	de pago	numero	comentario	Codigo	ingresos	gastos	saldo	A	de clientes	2 000,00	2 000,00		4 000,00	
4	100			saldo inicial			1.000,00		B	a proveedores	-300,00	-300,00		-600,00	
5	101	22/04/19		test 1	A	2.000,00		3.000,00	C	a empleados	-400,00	-400,00		-800,00	
6	102	23/04/19		test 2	B		300,00	2.700,00	D	seguros	-500,00	-500,00		-1.000,00	
7	103	24/04/19		test 3	C		400,00	2.300,00	E	gastos regulares	-600,00	-600,00		-1.200,00	
8	104	25/04/19		test 4	D		500,00	1.800,00	F	IVA y otros impuestos	-100,00	-100,00		-200,00	
9	105	26/04/19		test 5	E		600,00	1.200,00	G	otros ingresos	500,00	500,00		1.000,00	
10	106				F		100,00	1.100,00	H	otros pagos	-50,00	-50,00		-100,00	
11	107				G	500,00		1.600,00	I	impuesto sobre la renta	-100,00	-100,00		-200,00	
12	108				H		50,00	1.550,00	J	enajenaciones de activos intangibles	20,00	20,00		40,00	
13	109				I		100,00	1.450,00	K	inversiones de activos intangibles	-200,00	-200,00		-400,00	
14	110				J		20,00	1.470,00	L	enajenaciones de activos fijos	250,00	250,00		500,00	
15	111				K		200,00	1.270,00	M	inversiones de activos fijos	-300,00	-300,00		-600,00	
16	112				L	250,00		1.520,00	N	enajenaciones de activos financieros	50,00	50,00		100,00	
17	113				M		300,00	1.220,00	O	inversiones de activos financieros	0,00	0,00		0,00	
18	114				N	50,00		1.270,00	P	ingreso financiero a corto plazo.	0,00	0,00		0,00	
19	115				O			1.270,00	Q	pago financiera a corto plazo.	0,00	0,00		0,00	
20	116				P			1.270,00	R	intereses recibidos	0,00	0,00		0,00	
21	117				Q			1.270,00	S	dividendos recibidos	0,00	0,00		0,00	
22	118				R			1.270,00	T	aportes patrimoniales	0,00	0,00		0,00	
23	119				S			1.270,00	U	emisión de bonos y créditos	0,00	0,00		0,00	
24	120				T			1.270,00	V	reembolso de bonos y créditos	0,00	0,00		0,00	
25	121				U			1.270,00	W	subvenciones recibidas	0,00	0,00		0,00	
26	122				V			1.270,00	X	intereses pagados	0,00	0,00		0,00	
27	123				W			1.270,00	Y	dividendos pagados	0,00	0,00		0,00	
28	124				X			1.270,00	Z	libre	0,00	0,00		0,00	
29	125				Y			1.270,00			270,00	270,00	0,00	540,00	
30	126				Z			1.270,00							
31	127				A			1.270,00		saldo inicial	1.000,00	1.000,00		2.000,00	
32	128				B			1.270,00		saldo final	1.270,00	1.270,00		2.540,00	
33	129				C			1.270,00		diferencia	0,00	0,00		0,00	

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**Fig. 94: Cash flow statement**

	B	C	D	E
4		<b>Flujo de efectivo de actividades operativas</b>		
5	1	ingresos de clientes para la venta de		
6		Productos, bienes y servicios.	4.000,00	
7	2	- Pagos a proveedores.	-2.800,00	
8	3	- Pagos a empleados.	-800,00	
9	4	- Pagos por IVA y otros impuestos.	-200,00	
10	5	+ Otros ingresos, distintos de la inversión		
11		o actividades de financiamiento	1.000,00	
12	6	- Otros pagos, distintos de la inversión		
13		o actividades de financiamiento	-100,00	
14	7	- / + pagos del impuesto sobre la renta	-200,00	
15	8	= flujo de efectivo de actividades operativas	900,00	
16				
17				
18		<b>Flujo de efectivo de las actividades de inversión.</b>		
19	1	ingresos de enajenaciones de artículos de la		
20		activos intangibles	40,00	
21	2	- Pagos por inversiones en activos fijos intangibles	-400,00	
22	3	+ ingresos de enajenaciones de activos fijos	500,00	
23	4	- pagos para inversiones en propiedades, planta		
24		y equipo.	-600,00	
25	5	+ ingresos de enajenaciones de sujetos de los		
26		activos financieros	100,00	
27	6	- Pagos por inversiones en activos financieros.	0,00	
28	7	+ ingresos por inversiones financieras en el		
29		marco de gestión financiera a corto plazo.	0,00	
30	8	- <u>Desembolsos</u> por inversiones financieras en el		
31		marco de gestión financiera a corto plazo.	0,00	
32	9	+ Intereses recibidos	0,00	
33	10	+ dividendos recibidos	0,00	
34	11	= flujo de efectivo de actividades de inversión	-360,00	
35				
36				
37		<b>Flujo de efectivo de actividades de financiamiento.</b>		
38	1	Depósitos de aportes patrimoniales.	0,00	
39	2	+ Depósitos de la emisión de bonos y la		
40		admisión de créditos (financieros).	0,00	
41	3	- Pagos por el reembolso de bonos y créditos	0,00	
42	4	+ ingresos de subvenciones recibidas	0,00	
43	5	- Intereses pagados	0,00	
44	6	- Dividendos pagados	0,00	
45	7	= flujo de efectivo de actividades de financiamiento	0,00	
46				
47				
48		flujo de efectivo total	540,00	
49		+ Saldo inicial de efectivo y equivalentes de efectivo.	2.540,00	
50		= fin de fondos <u>liquidos</u>	3.080,00	
51				

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Several bank accounts can be processed. A table with the current totals of the cash flows arranged next to the data collection table is controlled from the maestra worksheet.

From the data of the bank accounts, the data of the cash flow statement result in the worksheet "presentación":

They are then completed by the cash register data, which can be fully allocated to groups A (cash register receipts) and B (small cash payments in a subsidiary cash register).

The original procedure has the advantage that an evaluation is possible very quickly without the detour via the accounting department. The data collected here can rather be imported into the accounting department.

#### **6.4.6. Valuation in financial statements**

The central tasks in the annual financial statements are the inventory of inventories, the valuation of receivables, the accrual of time-related expenses and income, the updating of provisions and the tax calculation.

During the year, the purchase of goods or materials is immediately treated as an expense, while the initial inventory of goods is treated as a size that does not change throughout the year. Alternatively, the effort can also be calculated



retrograde from the quantity of products sold (and therefore produced) multiplied by a bill of material of the average installed material.

Despite the simplifications, a permanent inventory is being used, which has already been addressed in retailer sales. The dealers or restaurant operators record the remainder of their goods in order to determine the quantity needed for the next purchase of goods. But this is about a pure quantity recording. For the annual financial statements, these holdings must additionally be valued at the cost of acquisition. This is usually the last purchase prices used. In addition, the amount of damaged material and a percentage by which the value is reduced are then recorded. The same procedure applies to finished products in production plants.

**Fig. 95: Inventory**

28	productos terminados			discapacidad		último		reclamaciones aún no pagadas			evaluación		
	Art. no.	designación	cantidad	cantidad	por ciento	precio	valor	Cliente no.	nombre	importe	debido	por ciento	concesión
29							0,00						0,00
30							0,00						0,00
31							0,00						0,00
32							0,00						0,00
33							0,00						0,00
34							0,00						0,00
35							0,00						0,00
36							0,00						0,00
37							0,00						0,00
38													

Hoja 1 / 3    Inventario / demarcación / período /    Predeterminado    | STD |    Suma:0

(Source: download file - There is only a Spanish version.)

The annual financial statements also include the valuation of receivables from the past year, which were not paid at the time the balance sheet was prepared. In addition to the amount and the due date, the percentage of this receivable is recorded. The reasons for impairment must be recorded in a log. From this a value adjustment is calculated as a correction amount.

**Fig. 96: Demarcation**

Archivo Editar Ver Insertar Formato Herramientas Datos Ventana Ayuda								
Arial 10 N C S								
12	B	C	D	E	F	G	H	
1								
2	Acumulación anual	a partir del	31/12/19	(fecha relevante)				
3								
4								
5	ganancias => pago							
6	de ...	hasta ...	importe	antes	días después	total	otro requisito	
8	01/10/19	31/03/20	500,00	92	91	183	251,37	
9	11/10/19	10/04/20	500,00	82	101	183	224,04	
10	21/10/19	20/04/20	500,00	72	111	183	196,72	
11	31/10/19	30/04/20	500,00	62	121	183	169,40	
12	10/11/19	10/05/20	500,00	52	131	183	142,08	
13							983,61	
14								
15	pago => esfuerzo							
16	de ...	hasta ...	importe	antes	días después	total	gastos pagados por adelantado	
18	01/10/19	31/03/20	500,00	92	91	183	251,37	
19	11/10/19	10/04/20	500,00	82	101	183	224,04	
20	21/10/19	20/04/20	500,00	72	111	183	196,72	
21	31/10/19	30/04/20	500,00	62	121	183	169,40	
22	10/11/19	10/05/20	500,00	52	131	183	142,08	
23							983,61	
24								
25	esfuerzo => pago							
26	de ...	hasta ...	importe	antes	días después	total	otra obligación	
28	01/10/19	31/03/20	500,00	92	91	183	251,37	
29	11/10/19	10/04/20	500,00	82	101	183	224,04	
30	21/10/19	20/04/20	500,00	72	111	183	196,72	
31	31/10/19	30/04/20	500,00	62	121	183	169,40	
32	10/11/19	10/05/20	500,00	52	131	183	142,08	
33							983,61	
34								
35	pago => ganancia							
36	de ...	hasta ...	importe	antes	días después	total	ingreso diferido	
38	01/10/19	31/03/20	500,00	92	91	183	251,37	
39	11/10/19	10/04/20	500,00	82	101	183	224,04	
40	21/10/19	20/04/20	500,00	72	111	183	196,72	
41	31/10/19	30/04/20	500,00	62	121	183	169,40	
42	10/11/19	10/05/20	500,00	52	131	183	142,08	
43							983,61	
44								
45								
46	cálculo de impuestos						ganancia	10.000,00
47							- ingreso libre de impuestos	500,00
49							+ gastos no deducibles	200,00
50							= ganancia imponible	9.700,00
51							x percent. de gravamen	25,00%
52							= importe de impuestos	2.425,00
53							- Anticipos de impuestos	2.000,00
54							= Atrasos fiscales	425,00
55							= Devolución de impuestos	
56								

(Source: download file - There is only a Spanish version.)



it may also happen that the provision must be increased. Finally, new provisions can be formed in the current year.

The tables of the file valoración.ods ask the small business owners the relevant questions in order to make the necessary evaluations for the annual accounts. The fields of the tables can be linked to other tables in which more complex calculations can be made individually.

## 6.5. cost accounting

### **6.5.1. cost units of craftsmen**

The calculation of the orders is already provided in the order processing. In most cases, cost accounting is limited to capturing overheads for the entire operation and monitoring cost recovery from labor and labor margins.

Something else can apply to builders who accept as well as minor repairs and complex construction sites as an order. For this, cheaper unit prices are offered in relation to the work done. In return, the contractor has a basic load for a larger order, while small repairs also cause idle times. An ideal combination would be if large orders with generous deadlines represent the basic load and then personnel can be deducted as needed for economically worthwhile minor repairs, so that there is no longer idle time. Because the large orders require price concessions, the determination of long-term cost-covering prices and price lower limits is important. Would be offered because of a short-term

underutilization very low prices, the normal price demands later would have to be elaborately justified at a normal load.

The reference quantity for the overhead costs would be the working hours used. It would be recorded separately for small and large orders. Overheads that only apply to large or small orders would be recorded in an appropriate cost center. For all other overheads, a general cost center is sufficient.

### **6.5.2. cost units of the taxis**

The taxi drivers distinguish single trips in the city and overland trips. For single journeys in the city a higher price is demanded at night, which is based on a calculatory night supplement for the own work force. Individual drivers also work day packages within the city. For tourists, it is usually cheaper to do single trips with different drivers. The drivers can only calculate the variable costs for an average route and cover the fixed costs of the day with the remaining contribution margin. The profitability of the operation depends on the number of trips. With longer waiting times is expected.

During a trip overland, the driver calculates the price from the variable costs for the route and the lost contribution margins of the day. The advantage is that it is safe to use, while during daytime driving there is a risk of underutilization. On special days with a high passenger volume, the driver would rather not accept overland travel.

### **6.5.3. cost units in trade**

In the trade a backward calculation according to the system of the division calculation is possible. With different cost centers, a multi-level division calculation can be organized. The difference between buying and selling price can be determined easily. After deduction of the tax on services, which is calculated from the sales price, the margins of the various products result. Retail selling prices in Cuba are subject to state price control. In other countries, a small retailer needs to be price driven.

The overhead of a month or year can be downscaled to a week or a single day. The margins of a week or a day must cover these overheads and additionally generate the profit. Because selling prices can not be fixed arbitrarily, profitability must be improved through an increase in sales or with cost savings.

In retail, parts of the salesroom can be defined as cost centers. So should products with special requirements, e.g. Cooling equipment to cover these increased costs with additional margins. Products with more space need to cover a greater part of the cost of the showroom because, alternatively, more products with a small footprint can be offered. Products that need to be picked up by the supplier must generate the additional transportation costs that the supplier has already considered in his price when delivered to the retailer.

In wholesale, it is possible to differentiate between product groups or customer groups with different costs by means of a cost center number.

#### **6.5.4. cost units in restaurants**

A restaurant had the peculiarity that during the day the normal restaurant business was running, while in the evening music was played and only drinks were sold. The kitchen was closed. The load was not very high during the day, while many visitors came in the evening. Here also less personnel was needed; On the other hand, the margins from the beverage sales were lower. The profitability of the various activities can be observed with the cost accounting.

For drinks, the bar has to be based on the prices of other restaurants. A surcharge calculation can be carried out to determine cost-covering prices, whereby the required prices (= market prices) should be higher. There would be two cost centers for the restaurant and the bar. The rooms would be assigned to an auxiliary cost center, the costs of which would be distributed to the two activities according to a suitable key. The overhead costs of the bar would then have to be added to the purchase prices. These overheads and overheads would once again be topped up for general overheads and another for the service tax.

In addition, a backward calculation according to the system of division calculation is possible. As in the trade, the difference between the purchase price and the selling price can be determined. After deduction of the tax on services, which is calculated from the sales price, the margins of the various products result. The proportionate overheads one day could be divided by the average margins. This would calculate from what sales volume the bar operation generates profits.

In the restaurant business, the purchase prices of food are low. The working hours for the different dishes can be different. However, because the cook processes several orders at the same time, the working time for a single dish can not be determined reliably. But relations can be estimated between different products. Because of the low cost of food, purchase prices are not considered as a suitable reference for the distribution of overheads.

It was therefore proposed to divide the restaurant operation in the cost centers kitchen and service. The overhead costs of the kitchen can be distributed according to the equivalence number calculation. One product is estimated at 100% based on the estimated preparation time, and the remaining products are estimated with allowances and deductions for shorter or longer processing times. For cost center operation cost rates per customer are determined on the basis of the monthly serviced customers after the division costing. The cost-covering prices of the individual courts result first of all from the individual costs of the ingredients, the overhead costs of the kitchen, which are distributed according to equivalence numbers, and the operating flat rates calculated with the division calculation. This subtotal is added to the general overheads as a percentage and then to the tax on services.

In another restaurant, there was a weak bar service next to the busy restaurant operation. Here the same procedure could be used. However, the bar was seen as a side activity, where customers can possibly bridge waiting times until a table is free. The operator does not have his own profit expectation from this operating part, which is why he does not want to observe the economic efficiency separately.



### **6.5.5. cost units for short-term rentals**

For short-term rentals, different sized or elaborately furnished rooms can be defined as cost centers. The higher fixed costs from the larger area or more complex equipment must be generated with higher prices. Auxiliary cost centers can be formed for cleaning and laundry. The landlords are interested in longer periods, because the rooms are not cleaned every day and laundry is not changed every day. From this, there are scope for discounts or bonus benefits for longer periods.

A separate cost center is necessary if breakfast is also offered. The purchased food and the (imputed) costs for the preparation must be taken into account here. The same applies to additional services provided for in the bill. Some landlords ask their guests e.g. a bike available. The amortization of the acquisition costs must be covered by the fee. If the bicycle is granted as a bonus for longer stays, redistribution between the cost centers may take place.

### **6.5.6. imputed costs**

The imputed costs also follow the basic pattern "Quantity  $\times$  Price". For depreciation, the quantity factor is "1: useful life" and the price factor is the current replacement value of a new item. For interest, the quantity factor is the tied capital and the price factor is the interest rate. In the entrepreneur's wage, the amount is the amount of work employed (100% or less) and the price is the lost salary from an employee's job or the salary of the replaced employee, or a

combination of both. For rent, the amount is the area used and the price factor is also the result of lost revenues or costs saved. For imputed risks, the probability of damage is the amount and the average expected damage is the price.

Calculated depreciation and interest have already been taken into account in the inversión.ods file. Depreciation can be based on updated data, which means that current depreciation can finance current replacement investments. There is thus a cross-financing of replacement purchases from the depreciation of items that need to be replaced later. With the formula

$$\frac{\text{current value}}{\text{remaining life}}$$

this goal is achieved. However, it will probably come in the last third of the planned useful life to significant deviations from the original plan.

The cost of capital tied up may be taken into account by first calculating a weighted interest rate on the loan interest and expected return on equity. Because all assets are financed from a mix of equity and debt, the residual value can be multiplied by that interest rate. The imputed residual value results from the factor

$$\frac{\text{useful life} - \text{period of use} + 1}{\text{useful life}}$$

multiplied by the current replacement value. This calculation path has the formulas of the file mapped.

**Fig. 98: Entrepreneur's pay and rent**

6							
7	<b>salario empresarial imputado</b>						
8							
9		60%	40%		20%		
10		sueldo	salario	costos adicionales			
11	persona	perdido	ahorrado	ponderado	ficticios	total	
12	A	300,00	350,00	320,00	64,00	384,00	
13				0,00	0,00	0,00	
14				0,00	0,00	0,00	
15				0,00	0,00	0,00	
16				0,00	0,00	0,00	
17				0,00	0,00	0,00	
18						384,00	
19							
20							
21	<b>renta calculada</b>						
22							
23			costos	40%		60%	
24		alquiler	adicionales de	ahorro	ingresos		
25	objeto	ahorrado	la propiedad	neto	perdidos	neto ponderado	
26	B	300,00	50,00	250,00	300,00	250,00 250,00	
27				0,00		0,00 0,00	
28				0,00		0,00 0,00	
29				0,00		0,00 0,00	
30				0,00		0,00 0,00	
31				0,00		0,00 0,00	
32						250,00	
33							

inventario / demarcación / provisión / costos / <

Hoja 4 / 4 Predeterminado

(Source: download file - There is only a Spanish version.)

Calculated entrepreneurial wage, imputed rent and imputed risks are represented by the file valoración.ods. For the first two case groups, the imputed costs are calculated from lost revenues and / or costs saved with your own resource. The tables of the file have a weighting factor which can form a combined value from both calculation paths. The entrepreneur can also opt for either way by weighting it at 100% and the other at 0%. The tables provide several lines for several co-entrepreneurs or several self-used objects. In the calculatory entrepreneur's salary the lost and the saved salary is entered and weighted. This value is increased by the mark-up for staff costs, which would

also be incurred for employees. At the calculative rent, the saved rent and the additional room costs, which would not arise to a tenant, are registered. The difference is the net saving of the owner of the business premises. The second calculation method from the lost rental income also deducts the additional costs and thus determines the lost net income from the non-letting. Both results are also weighted.

**Fig. 99: Imputed risks**

35	riesgos imputados						
36							
37							
38		daño	daño	daño	riesgo cada		
39	subjecto	máximo	mínimo	medio	... periodos	costos	
40		10.000,00	100,00	5.050,00	200	25,25	
41		10.000,00	100,00	5.050,00	200	25,25	
42		10.000,00	100,00	5.050,00	200	25,25	
43		10.000,00	100,00	5.050,00	200	25,25	
44		10.000,00	100,00	5.050,00	200	25,25	
45		10.000,00	100,00	5.050,00	200	25,25	
46							151,50
47							
48							
49		daño	daño	daño		número de	
50	subjecto	máximo	mínimo	medio	Riesgo 1: ...	incidentes	costos
51		10.000,00	100,00	5.050,00	10.000	50	25,25
52		10.000,00	100,00	5.050,00	10.000	50	25,25
53		10.000,00	100,00	5.050,00	10.000	50	25,25
54		10.000,00	100,00	5.050,00	10.000	50	25,25
55		10.000,00	100,00	5.050,00	10.000	50	25,25
56		10.000,00	100,00	5.050,00	10.000	50	25,25
57							151,50

inventario / demarcación / provisión / costos /  <

Hoja 4 / 4 Predeterminado

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For the imputed risks, a distinction must be made between volume and time-related risks. For periodic risks, the maximum and minimum losses are estimated in the event of risk occurrence, and then average damage is

determined as the price factor. The quantity factor is the number of periods in which the risk can be expected to occur. In case of probable damage in 10 years, the quantity factor would be "1: 120". For quantity-related risks, the price factor is determined in the same way. The quantity factor results from the number of events that are to be expected to be damaged multiplied by the number of transactions that are realized in the period.

If no damage occurs, the imputed costs are still recorded. If the risk occurs, the damage is treated as a neutral expense and not included in the cost accounting.

#### **6.5.7. Operating statement sheet**

The operating statement sheet (BAB) is from the internal point of view a very important source of information for the company management. In BAB I, the distribution of cost elements is displayed on cost centers (groups). This provides the basis for the distribution of cost centers to payers, the valuation of inventories of work in progress and finished goods and a product-related profit and loss account. The database is a reporting system for the individual and overhead costs in the operational functions (= areas of responsibility => Responsibility Reporting) and one about the sales and unit costs of the products or product groups (Activities => Activity Reporting).

**Fig. 100: Responsibility and Activity Reporting**

Respons. Report	suma	obtención	Prod. 1	Prod. 2	Prod. 3	administr.	venta								
consumo de mater	15.000		4.000	5.000	6.000										
Co. direct. salarios	5.400		1.300	1.700	2.400										
personal restantes	10.000	200	2.000	2.000	2.000	2.600	1.200								
depreciación	6.000	500	1.900	1.500	1.200	600	300								
energía	500	50	160	130	100	40	20								
reparaciones	90		20	35	25	10									
material restantes	519	75	10	67	73	208	86								
interés	5.000	300	1.500	1.300	1.100	500	300								
costo total	42.509	1.125	10.890	11.732	12.898	3.958	1.906								

  

Activity Report	facturac.	Inventarios - Cantidades				inv. in. De prod term.	costos de material			costes directos salarios				
		s. inicial	produc.	vendido	saldo final		Prod. 1	Prod. 2	Prod. 3	Prod. 1	Prod. 2	Prod. 3		
Producto A	11.100,00					1.000,00	1.400,00	1.400,00	300,00	400,00	650,00			
d.l.c. prod termin.		46	913	918	41	459,08	980,00	1.428,00	1.365,00	294,00	408,00	633,00		
Producto B	17.500,00					1.600,00	1.600,00	2.000,00	600,00	700,00	900,00			
d.l.c. prod termin.		64	1.284	1.278	70	702,72	1.632,00	1.568,00	2.064,00	612,00	686,00	929,00		
Producto C	16.000,00					1.400,00	2.000,00	2.600,00	400,00	600,00	850,00			
d.l.c. prod termin.		55	1.102	1.108	49	658,90	1.344,00	2.048,00	2.496,00	384,00	614,00	816,00		

(Source: download file - There is only a Spanish version.)

Responsibility reporting covers all individual and overhead costs that are consumed in the respective area of responsibility. For corporate planning, the actual values will be extended into the future. These data are mostly based on the evaluations of the annual financial statements. For the transition to the BAB I then neutral expenses should be kept as separate lines, which are then not taken over in the BAB. Calculated costs can be included directly in the BAB I outside the Responsibility Reporting. In order to avoid manual data entry, this can also be done with a separate table in the report worksheet.

Activity reporting not only reports on monetary units, but also on quantities produced and sold that are important parameters for day-to-day business. They relate only to finished products. In the individual costs the costs of the period are reported and the line "of which finished products" (de los cuales productos terminados) is added.

The tables of the BAB I + II in the "hdg" worksheet contain only formulas that access the "Report" worksheet. The BAB I is based on the Responsibility Reporting and the BAB II with the calculation of the inventory changes and the product profit and loss on the Activity Reporting.

In BAB I, the unit costs are managed as statistical variables that are used to determine overhead rates (in% of unit costs - last row). In the example of an extended BAB, production was differentiated in three stages. In addition, the traditional functional areas of procurement, administration and sales were planned. The reference quantities for the administrative and distribution overhead rates are the production costs of the products sold, which, however, are only calculated according to the BAB II.

The BAB II is divided into three tables. The first table lists the products or product groups in the rows and divides them into finished and unfinished products. It is assumed that the individual costs consumed in the period and not included in the finished products have to be included in the work in progress. The direct costs are added to the direct costs using the overhead rates determined in BAB I. The inclusion of changes in work in progress in the second table is therefore only a reclassification. The stock changes of the finished products are calculated from the quantity data of activity reporting. The calculated production costs of the products sold are included in the third table, in which a product-related profit and loss account is constructed. Here, the determination of profits is carried out in the horizontal instead of in the vertical. The lines now list the different products.

**Fig. 101: Operating statement sheet I + II**

Ni	B	C	D	E	F	G	H	I	J	K
2	hoja de distrib. de gastos I	suma	obtención	Prod. 1	Prod. 2	Prod. 3	administr.	venta		
3	<b>estadística</b>									
4	costes directos	20.400,00	15.000,00	1.300,00	1.700,00	2.400,00				
5	costos de producción						36.530,82	36.530,82		
6										
7	<b>gastos generales</b>									
8	personal restantes	10.000,00	200,00	2.000,00	2.000,00	2.000,00	2.600,00	1.200,00		
9	depreciación	6.000,00	500,00	1.900,00	1.500,00	1.200,00	600,00	300,00		
10	energía	500,00	50,00	160,00	130,00	100,00	40,00	20,00		
11	reparaciones	90,00	0,00	20,00	35,00	25,00	10,00	0,00		
12	material restantes	519,00	75,00	10,00	67,00	73,00	208,00	86,00		
13	interés	5.000,00	300,00	1.500,00	1.300,00	1.100,00	500,00	300,00		
14		22.109,00	1.125,00	5.590,00	5.032,00	4.498,00	3.958,00	1.906,00		
15										
16	Tasa de sobrecarga en %		7,50%	430,00%	296,00%	187,42%	10,83%	5,22%		
17										
18										
19										
20										
21	hoja de distribución de	co. dir.	+ Sobrecar.	Costos de	+ gast. gen.	Costos de	+ gast. gen.	Costos de	+ gast. gen.	Co. de fabr.
22	gastos II con camb. de inv.	de materiales	de material	produc. 1	de prod. 1	produc. 2	de prod. 2	Produc. 3	de prod. 3	del periodo
23	Producto A	3.800,00	285,00	300,00	1.290,00	400	1.184,00	650	1.218,21	9.127,21
24	de los c. prod. terminados	3.773,00	282,98	294,00	1.264,20	408	1.207,68	633	1.186,35	9.049,20
25	d. l. c. trabajo en progreso	27,00	2,03	6,00	25,80	-8,00	-23,68	17,00	31,86	78,01
26	Producto B	5.200,00	390,00	600,00	2.580,00	700	2.072,00	900	1.686,75	14.128,75
27	de los c. prod. terminados	5.264,00	394,90	612,00	2.631,60	686	2.030,56	929	1.741,10	14.289,06
28	d. l. c. trabajo en progreso	-64,00	-4,90	-12,00	-51,60	14,00	41,44	-29,00	-54,35	-160,31
29	Producto C	6.000,00	450,00	400,00	1.720,00	600	1.776,00	850	1.593,04	13.389,04
30	de los c. prod. terminados	5.888,00	441,60	384,00	1.651,20	614	1.817,44	816	1.529,32	13.141,56
31	d. l. c. trabajo en progreso	112,00	8,40	16,00	68,80	-14,00	-41,44	34,00	63,72	247,48
32										
33		15.000,00	1.125,00	1.300,00	5.590,00	1.700,00	5.032,00	2.400,00	4.498,00	36.645,00
34										
35										
36										
37										
38		Co. de fabr.	camb. d. inv.	Co. de fabr.	inv. Inicial	inv. Terminal	Co. de fabr.			
39	Cambio de inventario	del periodo	trab. e. prog. de la prod.	de la prod.	prod. term.	prod. term.	de las ventas			
40	Producto A	9.127,21	-78,01	9.049,20	459,08	406,37	9.101,91			
41	Producto B	14.128,75	160,31	14.289,06	702,72	779,00	14.212,78			
42	Producto C	13.389,04	-247,48	13.141,56	658,90	584,33	13.216,13			
43										
44		36.645,00	-165,18	36.479,82	1.820,70	1.769,70	36.530,82			
45										
46										
47										
48										
49										
50	retorno de las ventas	facturación	co. de fabr.	administr.	ventas	beneficio	retorno de las ventas			
51	Producto A	11.100,00	9.101,91	986,16	474,89	537,03	4,84%			
52	Producto B	17.500,00	14.212,78	1.539,91	741,55	1.005,75	5,75%			
53	Producto C	16.000,00	13.216,13	1.431,93	689,55	662,40	4,14%			
54										
55										
56		44.600,00	36.530,82	3.958,00	1.906,00	2.205,18	4,94%			

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