The profit situation of the individual products is the central information for the enterprise management. The system of BAB I and II (with the two other independent tables) shows how this profit of the individual products is calculated. The operational processes, which are often seen as a black box, are thus presented transparently, even if some things are generalized and simplified. Especially the small business owners have with this file a tool with which they can better understand their operation.

6.6. data transfer

The ods files can be used to organize a data transfer to a financial accounting software by creating a table in a separate worksheet according to the specifications of the software, which can be saved as a text file and then imported into the software. This can be organized via an upload via the Internet. The following posting records result from the ods files:

ventasR19.ods debit cash, credit sales

ventasX19.ods debit cash, credit sales

gross profit (=> debit expense, credit inventories)

purchase of goods

(=> debit Inventories, credit cash / bank / [liabilities])

ventasA19.ods debit [receivables], credit revenues

ventasC19.ods debit cash, credit sales

debit fuel, credit cash

debit car costs, credit cash

debit private withdrawal, credit offsetted vehicle costs

tax, insurance, depreciation

ventasM19.ods debit [receivables], credit revenues

ventasT19.ods debit bank / cash register / credit card, credit sales

caja.ods debit [expenses or assets], credit cash / bank / Credit C.

factura.ods debit [expenses or assets], credit [liability] salario.ods debit personnel expenses, credit liability

banco.ods debit bank, credit [receivables]

debit Bank, credit [Yield or Debt]

debit [Liabilities], credit bank

debit [Expense or assets], credit bank

inversión.ods debit fixed assets, credit offset

debit depreciation, credit fixed assets

debit expenses from asset disposals, credit fixed assets debit fixed assets, credit income from asset disposals

debit interest expense + loan, credit bank

debit offsetting, credit loans

debit imputed depreciation, credit calculated imputed costs

debit imputed interest, credit calculated imputed costs

valoración.ods debit cost of materials, credit inventories (old)

debit Inventories, credit cost of materials (new) debit Inventory changes, credit inventories (old)

debit Inventory, credit Inventories (New) debit Expenses, credit value adjustment debit Value adjustment, credit [claim]

debit Value adjustment, credit other operating income

debit other claim, credit [yield]
debit Prepaid expenses, credit [expense]
debit [Expense], credit other liability
debit [Income], credit deferred income
debit Tax expense, credit tax provision
debit other receivable, credit tax
debit [Expense], credit provision
debit Provision, credit [expense] or bank / cash
debit Provision, credit other operating income
debit imp. entrepreneurial wage, cred. offseted imp. costs
debit imputed rent, credit offseted imputed costs
debit imputed risks, credit offseted imputed costs

hdg.ods

no accounting

The information in square brackets is specified in the ods file.

The relationships shown in Fig. 48 on page 183 (goods-money cycle and closing items) can be stored from the ods files and data. From uploaded files, automatically posted accounts and automatically generated evaluations, the planned evaluations, in particular balance sheet, profit and loss account and cash flow statement can be created. For the internal accounting, the company accounting sheet I and II has already been presented in the hdg.ods file. For this purpose, an evaluation created from the accounting software would no longer be required.

Alternatively, the files ventas? 19.ods, caja.ods, factura.ods, salario.ods, banco.ods, inversión.ods and valoración.ods could be merged into one common file and then another worksheet for balance sheet, profit and loss Statement of financial position and cash flow statement. You can also set file references. This would have to be designed individually for the respective companies.

6.7. evaluations

6.7.1. internal accounting

For internal accounting, the activity statement sheet I was already presented as an overview of the distribution of cost elements to cost centers and the product profit and loss account, which was developed from the activity statement sheet II. You have obtained your data from activity reporting for cost units and responsibility reporting for the cost centers. To sections 3.7.3 and 3.7.4. will be referred. If this format is to be applied, the data would be compared according to the following pattern:

Fig. 102: Column format of the reporting

month				accumulated year			full year		
prev. vear	Budget	forecast	actual	prev. vear	budget	actual	prev. vear	budget	now expected

(Source: own illustration)

This would require corporate planning for the following year and regular updating of planning from the previous year for the current year. The motivation of small entrepreneurs for this planning is currently not very pronounced.

6.7.2. external accounting

The German formats of the balance sheet, income statement and cash flow statement presented in Sections 5.2.1 to 5.2.3 are characterized by a rigid structure. By contrast, IAS 1 and 7 only provide a rough overview of these evaluations. The companies should then subdivide these main headings on their own responsibility according to the positions which are essential for their activity. This international approach leads to more informative value than if company-specific processes were compressed into a rigid form.

For the balance sheet, the central distinction between fixed and current assets, equity and debt capital must be made. In the income statement, the most important distinctions are sales, variable operating expenses, personnel expenses, depreciation, fixed expenses, interest income, interest expenses and taxes. Here, only the variable and fixed operating expenses can be usefully broken down. In the cash flow statement, the minimum classification is the distinction between cash flows from operating activities and from investment and financing activities. The in section 5.2.5. Proposed subdivision of operating cash flow is sufficiently meaningful. On the other hand, the

investment and financing activities should be presented in a much more compact way.

The direct method suits the small business owners, because they record their business transactions predominantly from the cash flows.

7. Economy and politics

In the post-Castro era, new questions arise that require new answers.

7.1. economic policy opening

On 19.04.2011 Fidel Castro was officially replaced by his brother Raúl as President and Chairman of the Communist Party of Cuba, after he had exercised these functions already provisional because of illness Fidel since 01.08.2006. On 19.04.2018 Miguel Diaz-Canel was elected President, Raúl Castro is still party leader.

Diaz-Canel cultivates a different style of politics. While the Castro brothers presented themselves on propaganda photos always oversized and the people felt at most in the background, shows Diaz-Canel mostly in the middle of citizens. Even in television pictures, he does not talk to the people, but answers their questions. Even if one assumes that such appearances are made by the propaganda and it has been ensured that the president can only give convincing answers, the message remains to want to approach the people. At the same time, a Gorbachev effect, ie a collapse of the system with too rapid reforms, should be prevented. Of course, one can not seriously recommend that political leaders follow perestroika and commit political suicide.

On the other hand, the need for modernization in the economy is obvious. The exciting question is how to organize this necessary modernization. With the opening of the economy to private small businesses, since 2010, cautious steps towards the market economy have been made. Today, the small private sector has around 600,000 employees and can contribute around 15% of tax revenues. Alternative concepts for a modernization of the planned economy are not

recognizable. The fear of a Gorbachev effect may explain the seemingly contradictory behavior of the political leadership.

7.2. bureaucratic disability

The preparation of the project has overlapped with a change in the law. With effect from 7 December 2018, the rules governing self-employment in Cuba were changed, particularly with regard to short-term rentals, gastronomic services and transport. They have greatly unsettled the small business owners. Providers of gastronomic services in cafeterias and restaurants, bar and rest services, landlords of houses, rooms and rooms as well as construction service providers must maintain a tax bank account and maintain a credit balance of 2 monthly sales there. For the deposit a period of 90 days was granted. Business expenses are only recognized if they are transferred from the account. However, hardly anyone has a bank account.

The measure is likely to be based on the not-wrong state assessment that a large proportion of the cash-generating revenues are not reported as operating income. Of this, then operating expenses can be paid, whose receivers issue no receipt about it. The launch was preceded by a press campaign in the party newspaper Granma, which criticized the gaps in small business records. Some business professors want to divert attention to the question of how to help the Cuentapropistas accomplish their tasks rather than intimidate and gag them. They are in no way systemically critical. However, they realistically estimate that additional pressure provokes new evasive responses and that the political

goal is not achieved unless it was already advanced. Given the Cubans' improvisational skills over the past 30 years, they estimated that the measures are more damaging than beneficial to the government.

The measure can not achieve the official goal of containing the shadow economy. It can only help banks to finance themselves from the compulsory contributions of small businesses and thus lend to state-owned enterprises. There are also rumors about an imminent currency reform. Unlike in January, there are queues in front of the banks and Cadecas (casa de cambio - bureaux de change). The Cubans exchange their money reserves in dollars or euros, because they fear a devaluation of the CUP / CUC. The obligation to hold a bank account in CUC compels small business owners to expose their cash reserves to this risk of devaluation, hampers investment opportunities and leads to significant mistrust of small business owners in politics.

The implementation of the project was severely hampered by the Cuban side. The assessment of Cuban colleagues that the author should present his project during a preparatory visit to the Office for International Relations and that they would issue him the necessary certificate for a scientific visa, has not come true. The full-time head of the International Office was not available. The academic director of international relations saw the problem that the Cuentapropistas were under the Ministry of Labor and the university also had to apply for the passive support of foreign research in this field. For this, a certificate from the University of Applied Sciences of Mainz had to be obtained.

The permit was obviously not granted. Instead, the two colleagues who accompanied the author in the university and the foreign contact as career-advancing, asked after the end of the preparatory visit by the State Security. Then they ended their support. Two older colleagues, who had been kept in the first place and used only private e-mail addresses and other detours for their communication, continued the communication in a conspiratorial way. At least one of them apparently had the goal that a foreign publication with his assessments of the Cuban Cuentapropistas should appear on the Internet, which he and colleagues could then cite extensively in their own publications. He would have bypassed the permit requirement for his own research in this area.

The original plan to develop after the initial visit sample files in the Spanish version of Open Office for small business owners and to advise them after their first experiences with it in a long stay of 12 weeks intensive and the user experience while also improving the files used, could not be implemented in this form. Although the sample files were explained on the subpages of the website https://mueller-consulting.jimdo.com/investigación/ayuda and offered for download at https://www.noteninflation.de/cuba in the ods format. However, the constant support of the users could not be organized due to the lack of a certificate from the University of Applied Sciences for a scientific visa and because of the impossible long-term stay.

The Cuban professors were faced with the problem that they are part of the system as servants of public universities and the small business owners also distrust them. For these motives, the Cuban colleague had endorsed a project by a foreign scientist who could have had open talks without being close to the

government. But that would have required a longer stay and a science visa. The lack of cooperation of the university administration was perhaps also embedded in the political decision that after the introduction of tightening the discussion should be ended. Nevertheless, some of them were prepared to continue conspiratorial contact and to quickly propose an alternative solution should the policy fail with the publisher's internet publication.

After the tightening on 07.12.18, the small business owners were no longer willing to give the foreigner comprehensive insight into their business. At the same time, they were interested in suggestions for improving their operational procedures with the sample files. With the download offers a way was created for this. The clicks suggest that the URLs were redistributed and the files were also downloaded by Cuentapropistas, with whom no contact was previously made. Also, they were interested in the free software of Open Office and a briefing in spreadsheets and word processing.

On a second visit, the author, following a council of Cuban colleagues, booked a stay at an all-inclusive hotel facility in the neighboring province. The concern did not seem unfounded, because information system at the border were obviously purposeful questions about the purpose of travel deposited. The major tour operator and the fear of causing a stir, the passport controllers but then may have deterred by a refusal of entry.

As a precaution, the author assumed that he was also observed in the hotel complex. The feedback from the small business owners could now only be made during conspiratorial meetings outside their companies during tourist

trips. The low traffic density made the finding that the author was not prosecuted, however, easy. More precise statements are omitted here for understandable reasons.

7.3. Experiences of participating small businesses

A total of 123 self-employment activities are authorized, of which 52 are subject to the simplified scheme and 71 to the general scheme. Small business owners need an explicit license.

During the preparatory visit, contacts were made with two restaurants, two retailers, two taxi operators, a craftsman, a wholesaler (formally retailer but sold to other entrepreneurs) and a boarding house (tourist lodge). After the emergence of bureaucratic difficulties, the search for additional entrepreneurs had to be stopped, so that the target of 20 small business owners was not reached.

Of the 9 participants, 6 had a computer - the others got one, but only 3 had previously used a spreadsheet; the possibility for free download of Open Office was unknown to the rest. None of the participants was able to adapt the templates to their own needs. Here basics were laid.

Because of the tightening of the rules, the participants' questions also went in one direction, such as separating the bookkeeping into an official part of the tax return and a hidden part on a separate medium to cover the cash expenditure. The political goal, which was connected with the new regulation, therefore probably could not have been reached. The Cuentapropistas have recognized the potential that a micro SD card from a tablet computer can absorb much information and be easily hidden. However, the questions raised in this connection are not the subject of economics textbooks, even if the author was not completely unfamiliar with such topics from the field of practice during his activity before the professorship. Nevertheless, they were not included in the technical treatise of Chapter 6.

The participants agreed that the templates offered would sufficiently reflect their requirements. Parts would not be needed; Additional requests (with the exception of the black boxes) you do not have.

Because the young and ambitious computer science professor jumped off the project after visiting the state security, the possibility of an upload was not tested. A simulated with a data import function of an outdated German financial accounting upload was not possible because of the lack of a prerequisite for a science visa. Also one would not have been able to expect the small business owners that they would have been indirectly in the observation of the state security.

As an alternative to the upload, a balance sheet, income statement and cash flow statement could also be generated by means of a file reference with the tables for the operative business. However, because the small business owners are only guided by the tax regulations, there was no such need. Such a file could also be easily separated into an official and a covert part of the business,

which could then be consolidated in the evaluation of the hidden part for an evaluation of the entire company. However, in order not to provoke the Cuban authorities further elaboration of this idea was waived.

On the other hand, the idea of the young professor of computer science to develop an open ERP into which the Cuentapropistas could have uploaded their data would have blocked the possibilities just mentioned, because the combination of the data would have eluded the control of the Cuentapropistas. The development of a Cuban Open ERP with the possible introduction of a commitment for small business owners to use this system would have made a greater contribution to curbing the shadow economy than undifferentiated political pressure.

In summary, and perhaps reconciling, it can be said that the state distrusts small business owners, and small business owners distrust the state. They fear the control of the state and therefore deliberately refrain from a meaningful bookkeeping. This attitude is short-sighted, because: "If you can not see well, you should not drive a car! Who has no accounting should not lead a company! Both are driving the cart against the wall!"

On the other hand, the emerging inequality and hard-to-explain wealth of some Cubans is a valid reason to develop mistrust. The widespread belief in the common people that this cannot be right is putting the government under pressure. The general suspicion against small business owners is probably unjustified, even if imaginative designs are widespread in response to the bureaucracy.

The way out could lie in a mutual yielding. The state should start with a debureaucratization of the private sector and give the small business owners an advance of trust. On the other hand, an Open-ERP should also be set up and operated by a non-governmental organization based on the author's suggestions in this book. The small business owners would then have to be obliged to participate. However, control by the authorities should be limited to spot checks. This would create a system of accounting obligations and tax audits, as is customary internationally. Veiling revenues would be more difficult, but never completely excluded. The small business owners would be supported in their corporate governance and could generate higher income in the longer term, which would then lead to an increase in tax revenues.

7.4. disorganization

Improving business organization is not an exclusive concern of small businesses. In a seemingly state-owned business (even though prices in CUC were excellent), only a very limited number of customers were left in the business. Other customers were only allowed to enter the store when other customers had left. Thus, a socialist waiting community formed in front of the entrance and the customers extended their stay later, given the previous waiting period, which prolonged the queue further. Some people have left the queue again. The store was big enough and equipped with enough staff to let in and serve almost all customers who wanted to look around themselves anyway. This process organization was a sales prevention, not a sales promotion.

In the all-inclusive facility, where the author lived during his second visit, some uneconomic structures were also observed. At the entrance hangs a golden sign: "Property of Cubanacan", the state tourism company. However, the owner does not sufficiently care about the preservation and propagation of his property.

Fig. 103: Logo of the hotel and the cubanacan group





(Source: https://www.cubanacan.cu/en/hotelview/carisol-los-corales)

The Club Amigo Carisol - Los Corales Playa Cazonal is a twin hotel made up of Carisol and Los Corales. The Hotel Carisol is closed and the hotel Los Corales has 144 double rooms and 28 bungalow apartments. The closed neighboring hotel has 120 double rooms and 46 junior suites. On the grounds of Los Corales are still two four-storey buildings, each with 36 apartments in the shell. According to an employee who has been working at the hotel for 22 years, the facility is about 30 years old and the two shell buildings have been in existence since that time. After the completion of the apartments - if the structural condition should still allow after 30 years - and a renovation of the hotel Carisol would therefore be 968 places available. Then it would be very crowded and existing expansion areas would have to be used.

There were only about 30-40 guests in the hotel, of which about 80% Cubans. At this capacity, the hotel can not operate economically. Nevertheless, the number of staff was apparently measured at a capacity of perhaps 80% instead of 10%. So the own employees were also the most frequent guests at the hotel bars. Because the hotel also had to deliver the evening entertainment advertised in the catalogs, performances were purchased from the outside, which were then performed in front of almost empty tables. The obvious catastrophic economic results do not seem to have interested anyone. Maybe the decision makers will not even be informed. Of course, the author can not know which regular evaluations are presented to whom. It is also a debt of corporate governance. Under market conditions, the plant should have closed completely.

This poor utilization and especially the lack of foreign guests is completely incomprehensible. The hotel is located 46 km east of Santiago de Cuba. Most tourists want variety on vacation. A cultural trip with a narrow sightseeing plan is too exhausting for many and a pure beach holiday too boring. The hotel could fill this gap in the market. A shuttle service that would allow guests to make day trips to the touristically interesting Santiago could even be set up at almost no additional cost. The hotel has organized a bus transfer from Santiago for its employees. The morning shift will be picked up at 5:00 am from the residential areas. For picking up the late shift, which starts at 2:00 pm, an empty journey must be carried out. The same applies to the drive home of the early shift. If the empty run to Santiago at about 9.30 and the empty run from Santiago at about 16.30 would be carried out, about 50 tourists in this case could be brought to Santiago and picked up again. For a low fare could be required. The reduced comfort of the local buses would not disturb the tourists

who want to get to know the country. 50 day tourists would not change the cityscape of Santiago either.

Currently, guests have to rent a car for about 100 CUC per day or call a taxi from Santiago by phone, which is a bit cheaper considering the return trip. The cheaper option, to rent a motorcycle for 30 CUC a day, requires a lot of motorcycle driving experience in view of the poor condition of the roads and is not recommended for pure motorists. Therefore, such day trips hardly take place. Also, you hardly see any tourists in the cityscape of Santiago.

The fact that such marketing concepts have not been developed so far could be due to the lack of interest of Cubanacan's management. The tourism services are considered by the supply side and not by the demand side. From the lack of own country one is used to it, that all products are bought. The analysis of customer requirements is not used. Lack of demand is met with incomprehension, but not with a changed offer.

But there could also be a political intervention. After Internet forums it should give the shuttle service, which is however unknown on-site. The already quoted longtime employee has remembered that a few years ago, a Canadian tour operator had offered such a service for his guests. It can be speculated that these activities may have been politically undesirable. The money of the tourists is desired, but contacts with the local population are not.

However, the result is the same for both explanations. Thirty years ago, a lot of money was invested in a holiday resort, which could generate profits, but

which currently only makes losses and which is slowly letting go. Thus, the assets of the Cuban people, which should be managed by the national Cubanacan only in trust for the people, wasted. If this happens even in the strategically important tourism sector, then similar mismanagement can be suspected in other state-owned enterprises. The reasons can not be explained plausibly with the blockade of the USA; they are homemade.

7.5. Supply Crisis and Helms-Burton Act

In a report on a research project in Cuba, the current events during this time should not be hidden.

On 11/05/19 it was reported on https://www.tagesschau.de/ausland/kubarationen-lebensmittel-101.html that food and hygiene articles had been rationed. The measure was taken by official Cuban authorities with the tightening of the US Embargoes have been declared, while the cited source saw the cause in reduced oil supplies from Venezuela because of the local economic and political crisis.

The background of this report is first to explain the supply of the population. Cuba has two currencies, the Peso Cubano (CUP) and the Peso Convertible (CUC). Salaries and pensions are paid in CUP. The CUC is equal to one dollar (USD). In the banks, the CUC can be bought for 25 CUP and sold for 24 CUP. For the basic supply a voucher booklet (libreta) is issued, with which limited quantities of goods of everyday need can be bought at low prices. So for a

small bread 0.05 CUP is required. Outside the libreta, this bread is sold for 1 CUP (4 US cents) and another white bread, externally comparable to a baguette and not to the libreta, for 3 CUP (12.5 US cents). The available quantities are sufficient. The rationing means a cancellation of sales against CUP outside the libreta.

There are also shops where other goods are bought for CUC or a corresponding amount in CUP. Here, the prices are often even higher than those in Germany. In these shops, the offer has decreased. But with monthly wages of 500 to 1,000 CUP, shopping in these stores also requires an additional source of income. This is especially true for the visit to the mentioned in section 7.3 all-inclusive facility, which according to the Internet page requires 2-3 Cuban monthly wages per day; at Neckermann one day cost only a third. This suggests that some Cubans are likely to have substantial additional income, be it from the shadow economy or from corruption.

In December 2018, the shortage of food and daily necessities, such as flour, cooking oil, eggs and bread, became apparent first. Despite interim improvements, with the purchase of new machinery for the food industry and additional import contracts, the overall retail situation has continued to deteriorate. The product range in the foreign-currency stores has been thinned out, while consumers in the farmers' markets are struggling with rising prices.

The Cuban economy is structurally vulnerable to fluctuations in world market prices and, in the case of international sanctions, which significantly increases the cost of imports and interest rates on trade credits due to its high import requirements (around 70 per cent of domestic consumption alone is required for food) Height. Following the recent sanctions against Venezuela, which also targeted several maritime transport companies delivering oil to Cuba, the situation has continued to tighten.

On May 2, 1919, the US President enacted the third chapter of the "Helms-Burton Laws" of 1996, which was signed by its predecessors but suspended for violations of international law. Since the beginning of May 2019, legal disputes over goods expropriated by the Cuban Revolution have been possible in the USA. In addition, the limit on family money transfers has been halved and tourism has been further restricted for US citizens.

Section I of the Law contains measures to strengthen the economic embargo and a ban on indirect financing in favor of Cuba. Section II defines minimum requirements to be met by the Cuban State before the embargo is lifted. Section III gives US citizens (including naturalized persons) the right to sue foreign companies for alleged expropriation of property in US courts. Section IV authorizes the Secretary of State to exclude foreigners participating in or benefiting from expropriations of US citizen property in Cuba from residing in the USA.

It is incomprehensible that the Cuban people are always finding ways to tackle the problems that arise and to circumvent the demands of their government, but the government is not capable of equal creativity. The Helms-Burton bill was drafted past the then government by a senator and a member of the House of Representatives to serve populist sentiments. There are ways to circumvent this law. Any circumvention of an embargo is based on the following basic pattern:

A B

B

C

C

Fig. 104: Bypassing an embargo

(Source: own illustration)

The relationship 1 between A and D is interrupted by an embargo. As an alternative reaction, A takes on the relation 2 to B. The content of the relationship 1 is now provided with the relationship 3 in a country for which the embargo does not apply. D forwards the content of the relationship 1 to D with the relation 4. While the relationships 2 and 4 are openly maintained, the relationship 3 must be carefully masked. The relationships 2 and 4 are to be designed as normal business relationships, so that there are no indications as to where exactly the relationship 3 is to be sought. For understandable reasons, no further thoughts should be presented here.

But the main problem is not the law itself, but the unpredictability of US justice. In the meantime, every economic exposure of foreign companies in the US poses a high economic risk. The attractiveness of the US market, which is repeatedly stated, can only exist if profits can be made higher there than, for example, in Europe, and thus consumers in the US through higher prices bear the cost of their insane legal system.

But not only the US judiciary is unpredictable, but also its current government, and voters in the US! Not only the embargo policy of the United States against Cuba, but also against Iran is disapproved by the rest of the world. Tools to circumvent the Helms-Burton Act could also be used to trade with Iran.

In the long term, the world, especially Europe, Russia and China, should organize a world economy without the US and the US dollar, e.g. with the euro as world reserve and reserve currency or an international monetary system with a computing unit, similar to the ECU before the introduction of the euro and without an embargo on Iran and Cuba. The Cuban government could only develop ideas for this and discuss them with the governments of Russia and China. They would have to convince by their quality; otherwise Cuba would only be a spectator.

But then the cheap explanation would be omitted, which is also distracted by homemade economic problems. Even if the Cuban government does not want to commit a political suicide, it must already modernize its economy and organize it more effectively.

7.6. summary criticism

It is sad that loyal colleagues also need a foreign spokesman for their factual and constructive criticism. Any government should first examine impartial opinions before they are considered anti-state. This also applies to states with democratic deficits. A blanket response to criticism with repression is an indication of paranoia.

One can summarize this state-bearing criticism of the government-loyal Cuban professors in the following 5 points:

The measures from 07.12.18 are unsuitable for the achievement of the official goal. Appropriate measures are proposed in the report. The pressure on private companies must stop.

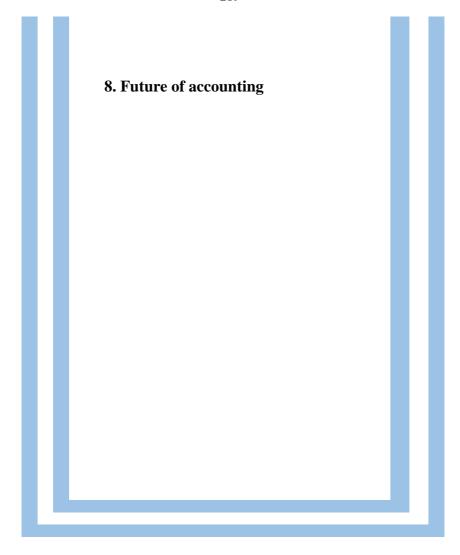
Especially in state-owned enterprises, there are a variety of uneconomic structures. The socialist economy needs a thorough improvement of the organization and economically efficient structures, without questioning socialism itself. But a badly organized economy is a waste of national wealth.

The small business owners should set up a non-governmental professional organization for practical support, which should also operate an OPEN-ERP. The state-owned enterprises should also use it. The professional organization

should have a scientific institute at a university that is constantly improving the procedures.

The supply of the population must be oriented as in marketing to the wishes of customers. Too often astronomically high prices are demanded that nobody can pay. A symbolic supply of products that nobody can buy will not benefit anyone.

The government should not confine itself to politically criticizing the US blockade. Effective measures must be developed to circumvent the blockade and thereby improve the situation of the population.



The question of the future of bookkeeping arises because Accounting 1.0 was applied unchanged from 1494 to about 1985 for nearly 500 years, and

sometimes placed in a series with Latin letters or Arabic numbers that may no longer be modernized. Accounting 2.0 has transferred this technology to EDP and initially only copied it. That would speak for immutability. But there have also emerged new applications that were unknown in 1494 and even 480 years later. With the strong networking of company information by means of the ERP system, Accounting 3.0 has been created in the last 10 years, at least in large companies, which has almost completely eliminated the data collection by the people. The bookkeeping will theoretically continue in this segment, but the accountants will disappear there. However, the previous accounting will disappear from the consciousness of the people.

Digitalisation involves a dividing line between top and bottom, big and small, north and south. Information has become a power factor. With better data, companies can be run more successfully. It is currently unclear whether these success factors will only be available to large companies in the north or whether small companies in the south, small companies in the north and large companies in the south will benefit from technical progress. There are technical possibilities to use the "big technology" even for small companies. At the moment, however, there is a lack of funding and, very often, the problem awareness of small businesses. Then it would be up to them to keep accounting data manually. It creates a two-class bookkeeping. Large companies have extensive information and small businesses must incur significant costs to meet the minimum statutory requirements through external service providers, in particular tax consultants. In addition, in the light of the technical possibilities of large companies, these are constantly being increased (for example electronic submission of tax returns, online audit). However, the state does not

offer small businesses any help with technical implementation, e.g. by a sample organization for small businesses, as described in this book.

"Modern bourgeois society, born of the downfall of feudal society, has not abolished class antagonisms. It has only replaced new classes, new conditions of oppression ... with the old ones. "(Karl Marx / Friedrich Engels, Manifesto of the Communist Party, London 1848, in: Institute for Marxism-Leninism at the Central Committee of the SED (ed.), Marx-Engels-Werke Volume 4, Berlin / GDR 1977, p. 463) The same applies to the transition from industrial society to the information society. If politics wants to learn from history and promote an evolutionary development of society instead of provoking revolutionary upheavals and associated upheavals, digitization must be shaped politically. Knowledge is power, and small business owners are not powerful! A peaceful disempowerment of the powerful with the leveling out of knowledge advantage avoids the necessity of revolutions. The future viability of small businesses would be strengthened and excessive concentration of the economy dominated by large companies that could afford their own ERP systems would be prevented.

A political control of digitization is also necessary for other reasons. Today, people are only supposed to provide companies with machine-readable data, and the data sent by companies is sometimes unreadable for people, or at least not understandable. In the context of digitization, man is made an appendage of machines. Politicians have to take action here instead of leaving digitization to large-scale companies and delivering their citizens without protection.

The Cuban government must also rethink! The small business owners are no threat to the state-controlled large-scale enterprises. Strengthening it is not a counter-revolution. Instead, they close gaps in the supply left by the state economy. It is in the interests of the people that this is done as effectively and efficiently as possible.

The current regulations for small entrepreneurs have the character of an overwhelming bureaucracy. Evasive reactions are the mandatory consequence. The politically desired effects can therefore not be achieved.

Large companies can also work more effectively and efficiently. Improvements in this area are also not counterrevolutionary. The adoption of suggestions from this book threatens at most lethargic functionaries who themselves have not developed any ideas for improving performance. The blockade of improvements is likely to have a greater impact on the Cuban economy than the US blockade. But the inner blockade is easier to overcome. You just have to want it!

9. Attachment

This book is the essential result of a research semester in collaboration with colleagues from the University of Guantánamo in Cuba. The interim results were reported on https://mueller-consulting.jimdo.com/reseaerch/ as well as on other subpages in English, Spanish, Russian and French.



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9.1. other relevant texts of the website

https://mueller-consulting.jimdo.com/research/idea/

The Council of the Department of Economics of the Hochschule Mainz has decided on 28 November 2018 for the project

Accounting in Developing Countries –

Testing the Lessons Learned from the Bookkeeping Project for Small Businesses in Guantánamo Province, Cuba

to give a research semester for Prof. Dr. Werner Müller. The application was accompanied by the following description:

1. Question

Who cannot see well should not drive a car! Who has no accounting should not lead a company! Both would drive the cart to the wall!

According to this claim, there would hardly be any small businesses in developing countries. However, a broader middle class is an important factor in the development of a local economy that could make these countries more independent of world markets. But this gap between demand and reality could be closed by technical means. The proposed project wants to clarify the following question:

Can small entrepreneurs in developing countries without accounting

knowledge be provided with technical aids and personal support with information about their company that allows them to conduct business effectively?

With the support of a professor from the University of Guantánamo (Cuba), a practical test is to be conducted to determine whether the information provided by the project "Accounting without an accountant" from the winter semester 2014/15 can be used to organize the necessary information supply at a reasonable cost.

The necessary information is the monthly data of a balance sheet, profit and loss account and a cash flow statement, as well as a simple cost and activity accounting with cost element accounting (especially with the calculation of imputed costs), cost center accounting (for cost control) and cost unit accounting (for the price and product policy). From this it should be possible to develop a planning for the future.

It is estimated that small businesses need business support. For this purpose, a local or regional cooperative could use multi-client ERP software (Enterprise Resource Planning - see also https://mueller-consulting.jimdo.com/supporting/erp/), which reads in a simple data entry of members from a spreadsheet, processes them automatically and provides the members with professional evaluations. An economically trained employee of the cooperative would have to look at the evaluations and draw the members' attention to opportunities and risks.

It would also be necessary to consider whether this advisory task could be tackled with a justifiable remedy.

2. Procedure

Due to the good education system in Cuba, there is a good chance that in contact with the university there will be developed an application which meets the requirements there, and which could later be used successfully in other developing countries.

2.1. Formulate output

It has already been formulated as the goal that monthly data of a balance sheet, profit and loss account and a cash flow statement, as well as a simple cost and performance accounting with cost type accounting (especially with the entry of imputed costs), cost center accounting (for cost control) and cost unit accounting (for the Price and product policy) should be generated. Partial costing data is considered less relevant because small-scale enterprises with limited capacity cannot or should not really respond to changes in volumes.

A specification should be made on the basis of the IFRS for small and mediumsized enterprises in coordination with the university there, but a large part of the contents of the standard should be deleted. Because the central question of small business owners, how much profit is achieved with which services, is not addressed by IFRS, this specific question should be answered with a simple cost accounting.

2.2. Formulate input

Based on the proposed output, it has to be determined which current data small businesses have to record for this purpose and how they have to be processed in the accounting software together with the cost accounting module as well as in sales, production and consumption statistics. These data and requirements must be modified for different industries.

After own suggestions for this complex a suggestion for the content coordination with the small entrepreneurs is to be worked out after a feedback of the university there.

2.3. Interviews with small business owners

The University of Guantánamo or the Department of Accounting and Finance of the Faculty of Economics establishes contact with 20 small private entrepreneurs from various industries. Interviews are conducted with them, asking for the business model, the procurement and sales market and the type of added value. The result is recorded in a log.

In a second part of the interviews, the small business owners would be presented with the designed evaluations and the data collection tools to ask for feedback. In particular, it must be clarified how complex data collection would be for the small business owner. After these responses, the data collection tools in particular would have to be revised.

2.4. testing

The data transfer will have to be offline for the research project, perhaps by visiting the small business owners once a week by a university assistant and copying their data. In the medium term, however, data transmission via the Internet will be possible by uploading a file. "By the year 2020, at least every second Cuban household should have Internet access. However, as part of its digitization strategy, Cuba does not want to limit itself to expanding Internet access, but also wants to build its own software services. For example, since last year, Chinese laptops have been manufactured on the island using the modular system, which are equipped with the local Linux distribution Nova." (https://america21.de/2018/03/197546/kuba-informationsgesellschaft)

The transferred data is first imported into an outdated German financial accounting software and after the accounting, the data of the accounts and cost centers are exported in a format readable for a spreadsheet. These are inserted into a data part of a spreadsheet file, with which the designed evaluations are generated.

During the semester, a contact to the Department of Computer Science should be established so that a Cuban ERP software could be developed there, which would replace the obsolete German software. (Addendum: A computer science professor from Guantánamo has come to me, who would be interested in the creation of a Cuban ERP software, provided that the accounting colleague and I can present him the exact requirements. After a first written description on

my part, he replied that he has contacts with the UCI in Havana and that he would like to get them on board, so the first address of the Cuban computer scientists would be involved.)

3. Effects

The most important result would be that you would create a copy template to strengthen the middle class in developing countries. This could strengthen sustainable economic development in potentially all developing countries and reduce their dependence on world markets.

https://mueller-consulting.jimdo.com/research/idea/background/

background

Each research project has to start with an analysis part that illuminates the environment in which one wants to move. You can compare the companies with vehicles. There are trucks, tractors, vans, cars and motorcycles. There are also mobile machines in which locomotion is only a secondary purpose. On the other hand, one can distinguish between production companies, trade and services. All vehicles have wheels, a chassis, an engine, a transmission and a steering. All businesses buy up inputs, create value and sell their services. They combine capital goods, consumables and labour. As with the performance of a vehicle, there are big differences in operational performance, but also many similarities.

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The task of the enterprises is the generation of profits over the value creation

process. It consists of the sequence of

Purchase => Production => Sale

The sale is designed to meet the needs of customers and to generate sales from

them. In production different factors of production are combined. When purch-

asing potentials (durable goods) and repetitive factors (consumer goods) and

labor can be distinguished.

The companies offer the markets a problem solution as a product. Thus needs

of customers have to be satisfied. Customers need to be prepared to spend

enough money to make the service cost-effective and profitable.

In order to realize the problem solution, a start-up financing of the added value

(1) must be organized. As a result, capital goods and production inputs are

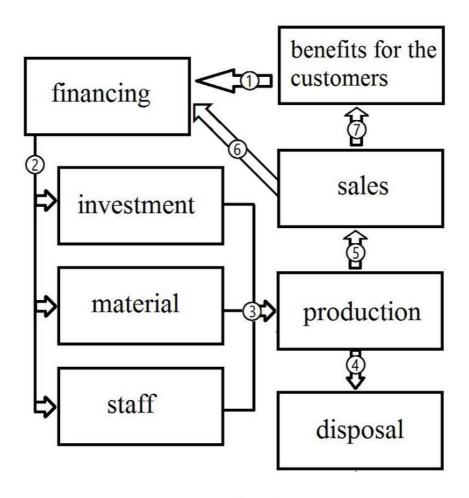
purchased and personnel (2) are paid. These three operational production fac-

tors are combined in the production to the operating performance (3). This also

generates waste and emissions (4) that must be disposed of or cleaned.

The processes can thus be simplified as follows:

Fig. 1: Value creation process



(Source: own illustration)

Operational performance does not have to be a physical product. The product in trade is the link between producer and consumer. Also services are products. Depending on the industry, investment, material and personnel have a different weight, but the basic structure is the same. The product is delivered to the

customer via the sale ⑤. The revenues will then be used to finance further value creation ⑥, and the start-up funding should also be able to be slowly repaid. Feedback from customers ⑦ should also be used to continuously improve the products.

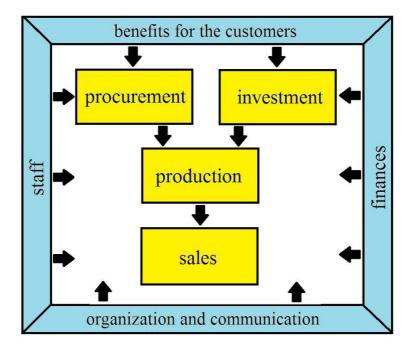
Subsequently, the procedures 2 to 7 repeat.

The purchase of labor can not be clearly assigned to the use or consumption. Formally, the worker sells a volume of working time. Then the work would be a commodity. However, the employer also cares about the education and training and the motivation of his workforce. In terms of content, they are more of an achievement potential. Then labor would be a commodity. The employer wants to use this commodity as intensively as possible, so exploit the work. Without work, the worker can not use his work force meaningfully. The exploited worker is thus better off than the income-free unemployed person.

The use of the production factor labor does not only take place in the immediate creation of the company's performance. This immediate value-added process is accompanied by many supporting activities. The deployment of personnel, as well as the use of money and the organization, thus accompanies the entire operational performance.

Because of the special nature of the production factor work and its widespread use, the graphic could be modified or extended as follows:

Fig. 2: operational processes



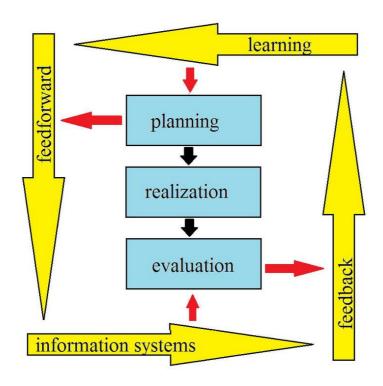
(Source: own illustration)

At the end of the 18th century, Adam Smith defined the factors of production, land, capital and labor. The capital is then exchanged for tools and materials. This distinction rather describes agricultural production. In the 19th century Karl Marx also understood the soil as part of the capital investment. At the end of the 20th century, there was a growing awareness that the role of soil should be taken by natural resources, which can not be increased. Especially in industrial production, raw materials are consumed and environmental pollution occurs. Also with this production factor must be handled so very sparingly.

In the 21st century, the realization is growing that organizational and technical knowledge is a fourth factor of production. This factor can also be increased easily. As in the nineteenth century manpower was replaced by machinery, today the use of capital and labor can be reduced with a smarter organization of production, and one can also conserve natural resources. For this, the processes and sub-processes must first be analyzed precisely and later simplified. The identification of the individual processes and sub-processes is necessary in order to be able to constantly assess and improve them. All conscious processes are planned more or less intensively and then carried out according to this plan.

The processes of planning, the implementation of the planning and the evaluation of the results are surrounded by a control loop. The planning results in a preliminary coupling, that is an assumption about the future. After that, information systems are designed to collect actual data for comparison with the assumptions. These information systems enable sound evaluation and feedback. Successfully implemented plans, which have led to positive results, are repeated. Failures should not be repeated and mistakes should be learned to organize a success in the next attempt. These learning processes lead to a new feed forward and improve the planning.

Fig. 3: continuous improvement process



(Source: W. Müller, Investment Accounting, Financial Planning, Financial Instruments, Norderstedt 2011, page 3)

According to this philosophy, the task of business administration is the optimization of value creation via the action levels, planning-implementation-evaluation and the support with information systems and learning processes. In addition to capital and labor, the factor information can be regarded as an important component in the generation of the company's performance. Accounting has been the company's central information system for more than 500

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years. With the technical possibilities of the 21st century, the database for cor-

porate management can be greatly expanded. In addition, information gathe-

ring can be accelerated and organized cost-effectively.

If you return to the comparison with the vehicles, then accounting is the cock-

pit. There is a speedometer, rev counter, fuel gauge and many indicator lights.

This includes the cables that report the data from the different parts of the ve-

hicle to the cockpit. The speedometer indicates the current speed and the driver

decides whether to maintain the speed, to drive faster or slower. A big coach

needs more ads than a small moped. But the moped driver must get the most

important information. The target group of this project are the moped riders,

not the large corporations but the small entrepreneurs!

https://mueller-consulting.jimdo.com/research/idea/technology/

Accounting without Accountants

The accounting of large companies has changed a lot in the last 30 years. Many

manual workflows were rationalized. Even small businesses have had

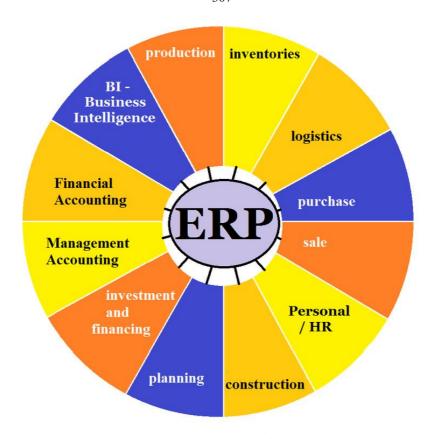
computers for over 20 years, and they can create technical structures that

enable them to generate all the information needed to run a good business

without expensive professionals. This task should pay much more attention to

business research.

Fig .1: ERP systems



(Source: own illustration)

The circular arrangement of the various operational functions in the ERP graphic does not indicate any relationships with each other. This would have to be done before the design of an ERP system. There are a variety of ways to represent the relationships between various operational functions. Here's an example:

operational functions: financing Inquiry / Offer investment Order Investor purchase Relations inbound logistics value added finance production payments Human र्फ fin. accounting Resources inventories internal Customer recruitment र्फ accounting Relations sale data entry workforce र्फ Public personnel Relations delivery administration

Fig. 2: operational functions

(Source: own illustration)

In a research semester, I had tried and tested processes that enable small businesses to record their business transactions without accounting skills in a spreadsheet. The data would then be uploaded to a server and machine processed in professional software. A little later, the desired reports would be sent back by e-mail in PDF format. In the meantime, the data in the companies is very strongly networked and the accounting programs are part of larger

enterprise resource planning (ERP) systems, which can be described in the diagram before.

The value-added process is made possible especially by personnel deployment and the financial sector as a navigation system of corporate governance. These three main functions (highlighted in yellow) list the most important subfunctions. There are also links marked by the arrows marked with letters. They have the following meaning:

to A:

The vast majority of investment decisions, and most importantly, the value creation process. Here, information from the value creation process is needed for decision-making.

to B:

Investment also requires funding. This is especially true for large-scale investments that are not covered by current revenue from the sales process.

to C:

Information about the scope of these financing options from operating cash flow is therefore required. However, financing does not only affect investments but the entire value creation process.

to D:

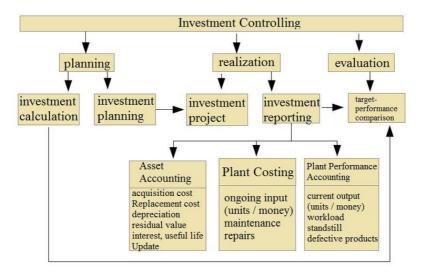
There is a close exchange of information between finance and financing.

to E:

Relations with lenders and shareholders must be maintained with the Investor Relations function, so that further financing options can be opened quickly if required. For this purpose, financial information is prepared and transmitted.

to F:

Investment decisions are also based on information from the financial sector. Investments made have an importance for corporate planning. Because about 80% of the future costs are determined by the investment, investment controlling should be recommended for optimizing investment decisions according to the following pattern:



to G:

The finance department needs ongoing information from the value creation process for its planning and control task.

to H:

The personnel deployment is predominantly in the value added process. For personnel recruitment, the personnel requirements must be determined here.

to I:

The value creation process is driven by the sale of the products. Therefore, the relationships with the current and potential customers must be maintained in order to create an optimal environment for the development of the company.

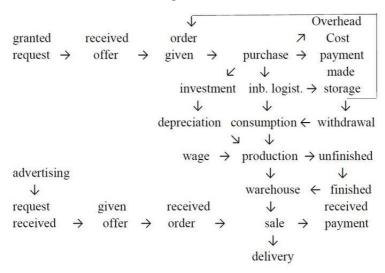
to J:

The positive environment can also be broader and understood as a social environment. Although this public relations task seeks to maintain the reputation of the company as a whole and independent of the products, its own target group will remain the starting point.

to K:

The line connecting personnel and finance is largely limited to the exchange of data from payroll accounting and personnel deployment, which are also mainly required for payroll and order billing.

From the value chain, the current processes can be structured as follows:



Explanation:

ERP system

Enterprise resource planning is about the holistic capture, mapping and control of value creation processes. Data will be gathered for the future, but based on past data. An ERP software accompanies all stages of the graphic above with a data acquisition. It is often necessary to collect data on quantity and monetary units. The approach "Quantity \times Price = Amount", but also "Amount: Quantity = \emptyset Price" or "Amount: Price Index = Amount" can be used. Accounting and controlling also access the data.

granted request

It is noted at which suppliers one has asked for which products. If you have refusals or no answers, you do not need to ask again.

received offer

The collection of unsolicited offers and responses to inquiries can also be a guide to future purchases. One knows the sources of supply and the price level.

Order given

Orders are placed based on current or past offers. If delivered later, you should check compliance with the appointment. For this, a file with assigned jobs must exist, which is differentiated from completed and still running jobs.

purchase

When purchasing, it has to be distinguished whether goods and services have been purchased for consumption in current production, for the general area or whether investment goods for use in production or in the general area. With the delivery a given order is done. In a less narrow definition, the tasks of inquiry, offer and order are also assigned to purchasing.

For goods that are bought repeatedly, a shopping article no. makes sense, under which the information from inquiry, quotation, order and delivery and later the stocks and consumption quantities can be recorded and evaluated.

inbound logistics

The purchases must go to the place of consumption. This can be done by the supplier delivering directly to the place of consumption or by organizing this transport in-house. It is also possible that the goods must be collected from the seller. For several different consumption types, intermediate storage in a material store is common. In inbound logistics, it must be known when and which transport must be carried out and which goods are to be stored where.

material storage

The storage is associated with administrative costs for entry and removal and for the ongoing operation of the warehouse. In this task, up-to-date data on the size of the stocks and on the turnover frequency must be generated.

withdrawal

When removing material from the warehouse, there is not only the amount of data collected according to the pattern "what? Where? for what? perform. "What?" Is the article no. covered. This involves updating the current inventory and controlling the optimal order quantities and times. "Where?" Specifies the area of responsibility in which the material is used and "for what?" The manufactured product or the completed order.

consumption

Consumption can be from a direct delivery or a withdrawal from stock. Services are always bought directly. Withdrawals can be recorded concretely or calculated retrogradely from the output. The result of the production over a period of time may be finished or unfinished products.

production

In production, the combination of the production factors capital and labor takes place. Capital distinguishes between potential factors that are slow to wear off and repetitive factors that are constantly being replaced.

unfinished

Work in progress is already consuming resources. They are therefore output of the current and input of the next period. The measurement and evaluation of unfinished products is fraught with difficulties, because not only their number but also the degree of completion should be determined. Here is to look for suitable simplifications.

finished

The finished products are available for sale. A central task is to compare the costs of manufacturing and distributing the products as well as the proportionate administrative costs to the sales and thus to assess the different profitability of the different products.

Product warehouse

Finished goods are first stored and kept ready for sale, unless they are individually made for this customer on his order and then shipped immediately. The stock must be constantly kept up-to-date on stocks and the next additions from ongoing production in order to provide accurate information on customer deliveries requests.

advertising

The success control is difficult with advertising. Nevertheless, in order not to incur useless costs, a goal should be formulated for each advertising measure. Subsequently, the search should be carried out for the data on which the achievement of the objective could be read. After that, it should be noted to what extent this data has changed.

request received

Requests received from potential customers should be saved and evaluated, even if they did not come to an order. You can tell from them what articles they need and you can try to get orders from them in the future.

given offer

Offers made are the basis for negotiations with customers. It can be expected that some of the products offered will be taken out later and / or other products added later. There will be several versions of an offer that should be available later.

received order

The final version of the offer, which is agreed upon with the customer, represents the content of the purchase contract concluded with the customer. If it is fulfilled later, a contract document or an order confirmation with the contract content and the date of completion should be created here.

sale

A sale in the strict sense is the immediate delivery of the goods to the customer,

often against immediate payment. Here is the sales record and issue the customer an invoice or receipt. The sales function in a broader sense also includes the stages of inquiry, offer, order and delivery.

delivery

This function includes the outbound logistics from the finished parts warehouse to the customer. Good planning means that unnecessary transports and thus costs are to be avoided. It is also necessary to confirm that the customer has received the goods, e.g. by acknowledging the receipt on a delivery note.

received payment

If the services are not paid immediately, they must be settled with data from the sale. The receipt of payment is to be checked and the customers may be reminded.

payment made

Related goods and services are invoiced by the suppliers if they have not been paid immediately. The due date of the invoices must be recorded and the timely payment must be organized.

wage

The production factor of work is evaluated by wages. The personnel deployment in the value added as well as in the overhead costs area is recorded, evaluated and recorded as the basis for the payroll accounting. These processes take place in the personnel administration.

Overhead Cost range

The consumption of resources is not limited to the value added stages in the narrower sense. There is also a general area that is not directly related to value creation, but still consumes resources. The goods required here are also procured in purchasing.

investment

The procurement of repeating factors does not flow directly into value creation. Because about 80% of the future costs are determined by the investment, a careful decision and selection with the help of the investment calculation is very important. An investment controlling to create a better database for the optimization of investment decisions is recommended.

depreciation

The ongoing wear and tear is to be recorded as depreciation. On the one hand, a periodization of the acquisition costs should take place for the accounting. On the other hand, substance conservation is to be organized via the sales process, which is why the current replacement costs are a more appropriate basis here. The estimation of the remaining useful life can also change in the last third of the useful life estimated at acquisition due to new findings. Depreciation may also be based on investment controlling.

The data must be recorded with quantity and monetary units in the following dimensions:

previous year current ▶ [extrapolation] ◀ forecast plan

Previous year

The data of the previous year can later be copied from the old files. Whether and to what extent the previous year's data should be inserted from other files in the first year of deployment would have to be decided on a case-by-case basis.

current

The current data is recorded in the constantly occurring data. The files are empty for the rest of the year.

plan

Once a year goals and realistic expectations are recorded in the format of the current and previous year's data. Thus, all evaluations for the future can be generated, which can be assessed in terms of plausibility and possibly also be corrected. The objectives and sub-goals set on this basis remain binding during the planned year.

forecast

Based on new insights, the assumptions are updated in a copy of the plan data. Also, measures for a course correction, e.g. Spontaneous austerity measures are incorporated into this data.

extrapolation

From the actual data for the past months and the forecast data for the remainder of the year, an extrapolation is made to the whole year by machine. But even under these conditions, small businesses can use the full width:

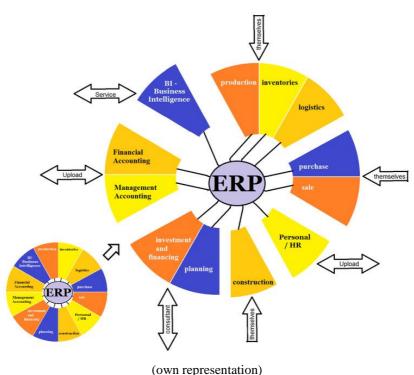


Figure: ERP for small businesses

The individual components of the ERP have to be pulled apart while maintaining the networking. The tasks from the value-adding-chain must be supported by applications that the small business owner directly applies himself. These are in particular purchase and sale, but also production, inventories and logistics. The corresponding parts of the ERP system have to become autonomous at a limited extent and a data transfer has to be organized.

The task of design or product development is not part of the everyday valueadding-chain, but still an original task of the entrepreneur.

The areas of Financial Accounting and Management Accounting as well as personnel administration, on the other hand, can be operated with the upload of self-recorded data or data exported from applications in the value-adding-chain. The use of information technology could use the service of a service provider. The preparation of investment and financing decisions as well as operational and strategic planning can be supported by a qualified consultant.

It is important that the information flow to the ERP is maintained even with a stronger division of labor with outside support.

9.2. Motivation and person

One can compare the management with the control of a ship. Both are clumsy and slow to respond to course changes. Both have no brake. If a large ship goes to New York harbor, the captain can switch off the engine 15 to 20 km beforehand. Both are dependent on external influences, ships of weather and current, a company of the economy and the competition. Both have to navigate, so determine the current position and the destination and then calculate the course. The ships have GPS today. Both need information. The ship has radar and gets weather data. For a company, the information comes from accounting. With general computer deployment, corporate governance is expected to be as good as the captain of a cargo ship today with radar and GPS.

The accounting of large companies has changed a lot in the last 30 years. Much of this has not been noted by the authors of the textbooks, nor by many of my colleagues. They spend too much time calculating numbers in class. Companies have been computing computers for more than 30 years. For the students it is of course convenient to get their good grades in the exams with simple arithmetic. But that's a different topic.

Even the small businesses have been computer for over 20 years. Democratic business theory, which is geared towards the interests of the masses and not a small minority, must respond much more to their needs than to those of large corporations. 90% of companies in Germany have less than 10 employees. If the taxpayer finances science, then these 90% and not the 0.3% large companies with more than 250 employees need priority support. It's also possible to create technical structures for small businesses that can generate all the information needed to run a good business without expensive professionals. This task should pay much more attention to business research.

The author is Professor of Accounting and Controlling at the University of Applied Sciences of Mainz. His professional career is untypical for a professor. The most important stations are mentioned here in keywords:

- after school without apprenticeship
- unskilled construction worker, from 18 shift work in chemical industry
- trade union and politically active, i.a. in the peace movement of the 80s
- Training for industrial clerk supported by the employment office

- Higher education access via 2nd education path
- Studies in business administration and economics
- Approximately 9 years of professional experience in accounting, most recently as financial manager in the German group of an international group of companies
- 1991: apprentice aptitude test
- 1992: Advanced training as a certified accountant
- 1994: Part-time doctorate at an institute of business information technology
- 1996: Tax Consultant Examination
- 1997: Appointed Professor of Accounting and Controlling

