

ifm electronic



VISION
PHILOSOPHIE
LEITSÄTZE

VISION
PHILOSOPHY
PRINCIPLES

ビジョン
哲学
基本方針

远景
易福门的宗旨
易福门的企业原则

비전
철학
기본 원칙





VISION PHILOSOPHY PRINCIPLES

Ideas, perspectives, and corporate principles
which shall jointly accompany,
shape, and unite us.

9th edition
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Dear colleagues,
Ladies and Gentlemen,

In 2007 the ifm management has adapted a few points of the philosophy which has existed since 1990 and had remained unchanged since then.

In many cases of adaptation we are simply following reality. The philosophy, for example, pointed out that we would continue the co-operation with our trade partners — such as VEGA in the Netherlands or Kühnel in Austria. This co-operation, however, does not exist any longer as the companies have been sold.

The same applies to a change made in the chapter Market. In our philosophy of 1990 we limited the Asian market to Japan which was certainly correct from the point of view of 1990. However, reality has overtaken us here in the meantime since ifm is investing immensely in all of Asia, is setting up new markets and will continue to do so in the future.

The principles and the philosophy of our company have, of course, remained unchanged. And the ifm management of the year 2007 wants to make it clear that they still stand by the principles which have been lived for many years, documented since 1990, and are now presented again in this current version.

These principles are for us immovable pillars of our actions which serve as orientation for each employee and each partner of ifm.

Many companies tend to adapt their company philosophy and principles to the respective management. That is a strategy which ifm will definitely not support. Company philosophy and company principles are long-term and living ideas which cannot simply be abandoned when a management changes. They are the soul of the company!

With this brief introduction we want to document that we also respect and exemplify the philosophy and the corporate principles of ifm and at the same time will demand observance of these rules from each employee.

Wishing us all many more successful years to come.

Essen and Tett nang, in 2007

ifm electronic gmbh

Your management



Martin Buck



Michael Marhofer

Dear colleagues, Ladies and Gentlemen,

The ifm management has elaborated ideas, perspectives, and principles entitled:

- **vision of a future**
- **ifm's philosophy**
- **ifm's corporate principles.**

The ideas contained shall influence and shape ifm and all its employees in their moral concepts and their conduct for years to come.

In order to clarify our approach some explanatory remarks will precede the essays.

Vision:

The questions on what our world will look like in 20 years or even 30 years from now and what the demands on our company and its corporate entity will be cannot be answered objectively by anybody at the present time.

However, these questions are of great interest to all of us. Many of us will still be working then. We would like to know not only what prospects are on offer, but also what security we can expect.

Some of us have children who within this time span will start their careers. For them an early orientation concerning their education and training is important.

Above all, we are all together responsible for the future which takes social, eco-

nomic, and ecological aspects into consideration. We can only fulfil this responsibility when we are aware of the consequences of our actions and in time start looking for solutions and new ways to minimise their impact.

There are various reasons why ifm's management has dealt with the questions of how the world might develop in the future.

1. ifm's development is directly connected with the development of our environment.
2. If we want to grasp opportunities we have to find out where these opportunities can be found.
3. The attempt to view the future helps to see the risks for ifm and to limit them.
4. ifm's claim of being a special company can only be fulfilled if we are better prepared for the future than others.
5. It is important for the relationship between employees and management to have a common — or at least commonly known — idea of the possible future of the company.

The result of our consideration — Our *Vision* — is what we want to present to you with the wish that you study it critically.

We know that our vision is based on many premises, and the resulting consequences **are open to debate** and **cannot be proven**. The interpretation of some of these will not necessarily conform to each reader's **personal belief**.

It was not and has not been — and we would like to emphasise this point consciously — our intention to ask the questions:

- Do we agree with the described “world of the future”?
- Do we want to live in such a world?
- Do we even want such a world?

Neither did we consider it our task to think about the future development of political structures or the elimination of social problems although these questions are undoubtedly of importance and great interest.

It was our goal to collect as much information about the future as possible, to assess it, and to compare the conclusions of various experts with our own imagination and with the actual experience of what technical development has taken place in just the past 30 years.

The results show fantastic possibilities of development for our environment. They make clear — and that is our particular con-

cern — the tasks for ifm and the challenge and opportunity for the company — and that means for all of us.

The reflections about the history of mechanisation and automation which we put at the beginning of our vision may, however, show you clearly that we have already left a part of this “technical utopia” behind us.

Philosophy and corporate principles

The philosophy summarises our basic attitude to the cornerstones of our corporate activities — employees, customer/market, product. Since the founding of ifm our actions have been determined by these principles. They shall remain an obligation for us and for all ifm employees.

In keeping with the corporate principles we want to decide on standards for the conduct of the company and its employees, valid for the long term, which we all will be compared with day after day. The standards are such, however, that the company and all its employees can readily identify with them in their contact with their environment.

Philosophy and principles consciously mix existing company culture with our dreams.

Of course we know that today's ifm cannot meet all the requirements imposed by ourselves.

But it is our firm intention to work on the extensive realisation of philosophy and principles with much patience, required energy, and above all with your cooperation.

We wish you and ourselves that reading and having a critical look at "Vision, philosophy and principles" will not only cause you to reflect on them, but that they may inspire you with some of the confidence and faith that we feel is required for sustained and positive development of ifm and its employees.

Essen, June 1990

ifm electronic gmbh

Your management



Robert Buck



Gerd Marhofer



Bernhard von Spiczak



1 Vision of a future

Introduction

Sensing, networking, and control technology for the automation of a wide variety of processes to humanise society is the corporate mandate given to ifm by the partners.

Working on this mandate will occupy the company for many generations since automation is a task which has been with mankind for about 6,000 years.

This task of automation combines technical progress and technical revolution. With the help of technology mankind is heading towards a future which — also referred to our mandate — can only be imagined and understood in outline. There

exist already many technical prerequisites which even today facilitate the work with which man earns his living. The future will create possibilities which from today's point of view might seem sheer fantasy.

This essay is intended to provide a better understanding and to facilitate the belief in this fantastic future. From historical development and from today's knowledge we have derived a vision showing that this company has every chance of being successful and growing.

ifm wants to give its staff at all times a feeling of security based on the opportunities outlined in this essay.

History and development of mechanisation and automation

ifm and all of today's companies would not exist if our ancestors had not started technical development some 6,000 years ago.

About 6,000 years ago the Sumerians invented the wheel.

This revolutionary invention was the beginning of a technical development which is still continuing today. Again and again new applications for the wheel are and have been found.

First it was just the cart that by means of the wheel could be used for easier and quicker transportation of goods. (This invention can certainly be classified as mechanisation. At the time it caused unemployment and hunger. Carriers or pack animals and their owners were no longer needed.)

Numerous things were added later without the wheel itself being changed if you disregard further technical development.

If you take a car for example, many things are based on this invention, starting with parts of the engine, over gear and drive wheels for power transmission, from auxiliary aggregates to power trains, from the cog wheels in the gearbox to the four visible wheels. The steering

wheel, too, can be put down to this invention.

In the early times spinning wheels, potter's wheels, water wheels, lifts etc. came into existence. The Italian Leonardo da Vinci (1452–1519) is considered to be the first technician who tried to create a connection between theory and practice. Leonardo da Vinci saw himself first of all as an engineer. He designed various machines for use in war, but also machine tools, excavators, diving equipment, and much more.

In the 18th century with the beginning of the "industrial revolution" in England the further technical development speeded up. It started the transition from the agricultural to the industrial society at the same time changing society's structure.

The first automatic power loom existed as early as 1784. It took until 1879 for the first electrically operated loom to appear.

At the beginning of the 19th century partly automated machines were used in agriculture. In the 20th century we speak of the automated factory or the automated office.

We are still very far away from automation in the actual sense of the word,

but possibilities are becoming more concrete and understandable.

Technical development caused a variety of social changes.

So-called thresholds of civilisation occurred in the individual periods of development. Crossing another threshold often resulted in big problems, unemployment, and poverty for the working population concerned. Riots (in later times strikes) and destruction of machines and complete factories were the result. This did, however, not stop technical development.

After each period of shock had been overcome positive changes for the structure of society followed. There were new professions. Goods could be produced more cheaply. This resulted in higher consumption. The efficiency of the economy and the general standard of living increased.

Only continuous further development of the technical possibilities could in the past conquer poverty and get rid of mass unemployment. But the improvements were not appreciated until much later.

Today we only work half the time as our ancestors did 100 years ago. We enjoy social security and a standard of living that

leaves hardly anything to be desired.

And it is here that we have to come up with the following questions:

Should we not work hard now to make the future as good as the present?

Can we consider ourselves safe or are there not dangers lurking everywhere for our (relative) prosperity?

If one day we cannot sell our goods any more because of lethargy, carelessness, and arrogance, because other countries produce more cheaply, offer a better quality and provide the market with technically better and more sophisticated products the social problems will return and destroy the perspectives for our future.

Therefore we have to start straight away to work on a new education strategy which includes technology. New technologies should therefore not be condemned and considered to be job killers. They offer additional opportunities and open up various new possibilities for the world economy and for ifm.

With the knowledge resulting from the research and development work of the past 30 years mankind is just passing another threshold of civilisation, and a new period of development is beginning.

Prerequisites for a positive development of the future

Up to today ifm has owed its existence and success to the technical development and to the imagination of the partners and the employees.

Further technical development continuously produces new professions and makes old ones disappear. In the same way new companies are established and companies with antiquated products and outdated forms of organisation disappear from the market. Unless they have learned to be open to new developments.

ifm is an example of the latter.

Electronic sensors are replacing electro-mechanical switches. This helps ifm to be successful. But if ifm does not have the far-sightedness and imagination to picture a future demanding completely different solutions for sensor technology and automation and does not prepare in time for this future with its research and development, ifm will one day have to make way for a company whose products are better suited to meet the need of the market.

A successful future will be possible for our company because man will

withdraw more and more from executing work.

During the first step machines and robots take over the production. Later "intelligent" machines will be designed which monitor and control automatic production processes without human intervention.

Knowing of the challenges and continuously thinking about future demands, requirements and wishes of the market, discussing and having a critical look at the technical development will enable ifm and its staff to be better prepared for the future than others and to avoid risks.

ifm's field of performance has been and will continue to be generally defined as follows:

- to collect information and data
- to transmit them by fixed link or by radio
- to classify and convert them and make them comparable
- to compare them with given set values
- to pass them on as commands necessary to instigate corrective measures
- services around the above topics.

Vision of a future

Our vision does not assume that military conflicts and social tensions limited in space and time that we are experiencing to a larger extent at the moment will lead the world into chaos.

We believe and assume that in the long run there will be international political and economic co-operation, security of the peace of the world and mutual tolerance and support for the benefit of the population of the entire world.

In this atmosphere social conditions will develop which permit and in the end necessitate that man relinquishes his current direct involvement in the execution of production processes and transfers this role to the technical solution.

Man's job in the past was and will of necessity increasingly be to find further technical solutions.

"Technical solutions" will in future be so complex that they cover several levels on which processes are carried out automatically, exclusively controlled by computers.

The following could develop:

On the first hierarchical control level, the so-called "operational level", information is detected by sensors, passed on for

evaluation to assess the information and compared with given set values. In case of differences correction commands for reaching the set values are given automatically. When the set values have been reached completion report is made to a higher technical level.

This is as far as ifm's mandate has been defined.

On a second hierarchical control level, formed by the so-called disposition computers, the functions of several decentralised operating units are coordinated in accordance with given data and information.

Several disposition computers are allocated to an "intelligent" command computer of the third hierarchical control level in which all expert knowledge available is stored and which because of its "intelligence" can take the necessary decisions for processes independently of all human intervention.

In this or a similar way it will be possible — and that is already conceivable today — to not only revolutionise the production process, but also many other technical processes.

These will include automatic flying and navigation of ground vehicles and

aircrafts, automated examinations and diagnosis in medicine, far-reaching changes in communication engineering, further automation of administration and stock-keeping and many other things.

Under these conditions mankind will master the future in a positive way. And we can expect a — in the technical sense — really fantastic future.

Many experts assume that in a not too distant future the population of the Earth will be 15 billion people. We have based our considerations and future prospects on this figure.

Preparations have to be made that this number of people to be expected does not lead to chaos.

ifm wants to help to keep and make our world worth living in — not only in the technical sense. This will result in a variety of opportunities for a continuous positive development of the company and its employees.

15 billion people

- need enormous amounts of energy
- need to develop an agriculture and nutritional industry that will not let anybody starve
- will create industries that satisfy their

needs and use processes (e.g. recycling) which prevent an exploitation of raw materials

- will have transportation systems with which transport and distribution tasks for men and goods can be solved safely and fast
- are entitled to good health up to their old age by means of the best medical treatment available
- expect us to hand over an environment worth living in.

If the technical solutions for these challenges are not found, mankind will question its existence.

- They will starve because they are not able to support themselves.

(Everything will go on as before. The population of the Earth, industrial production and production of food will in the beginning increase rapidly. The next step will be a shortage of raw materials, industry and later whole national economies will collapse.)

- They will starve because the Earth is polluted.

(Even if sufficient raw materials can be provided, a continuous growth of industry and unsolved waste management problems will pollute the Earth

- and contaminate the fields. The supply of food will collapse.)
- They will exterminate themselves in a world-wide nuclear war.
(Because man's unreasonableness does not lead to convergent goals and coordinated efforts, but causes military conflicts for narrow-minded advantages and space for survival.)
- To ignore a far-sighted planning can have tragic consequences for the future of the Earth, and also for the future of a company that wants to remain secure and successful.

The possibilities to keep the world worth living in and functioning exist already. Highly developed national economies do not have to make their decisions dependent on existing ways, but can create their own methods and conditions to make their decisions successful.

The period of great discoveries is finished. According to Nobel prize winner Sir McFarlane Burnet almost all important basic inventions have been made. Human inventiveness will now have to improve the existing technical systems by using this basic knowledge or to make new systems accessible for using.

15 billion people

need enormous amounts of energy to create the conditions for living.

The generation of energy, however, is only possible if a perfectly functioning industry can create the necessary conditions.

From the large number of possibilities of producing energy two solutions have taken shape as being feasible and sufficient. On the one hand the placing of huge solar reflectors in space, on the other hand the production of energy from nuclear fusion reactors that are stationed in the sea like artificial islands. Here they find inexhaustible amounts of the ideal high-energy fuel — salt water — and at the same time plentiful cooling medium for the waste heat.

There will certainly be other additional alternatives for the production of energy that will be discussed in the course of time. No longer considered will be today's energy sources such as coal or oil. The supplies of these fossil materials are limited. Various contaminants are created during their combustion. Furthermore, they use up oxygen, oxygen which this world needs so badly for survival.

ifm's mandate:

1. Analysis and processing of information on energy management in general
2. Division of energy management into industries and analysis of the needs of these industries
3. Summarised assessment and recommendation for ifm's corporate policy.

15 billion people

will be capable of looking after themselves and feeding themselves by means of the energy produced.

According to current knowledge every person needs an average of 0.9 hectares of arable land for his needs, taking into account the conventional, agricultural method. The Earth altogether has a land surface of 3.2 billion hectares. This shows very clearly why today whole peoples are starving. This situation will have to change and a change can be accomplished. Mankind's future supply will be possible by using food/agrarian factories, especially since the existing distribution problems can also be solved.

The farmer will become a food chemist. This is an enormous threshold which will present many challenges. It will not be easy to change 10,000 years of

farming, but the change represents an opportunity to survive.

In order to feed 15 billion people with good quality food in sufficient quantities the Earth will need six times as much food as is produced today. Conventional agriculture cannot achieve this. On its own it will not be possible to eliminate hunger from this world.

New methods for raising crops will complement and replace the conventional ones. The moving from outdoor fields to the light-flooded halls of modern agrarian factories has already started. Food can be produced everywhere on this Earth without farm land, and it can be harvested the whole year round.

Providing food requires an incredibly large industry that gets part of the raw material from the agrarian factories. The rest will be taken from the chemical sector where raw materials for the industrial production of food can be obtained through chemical and biochemical processes.

At the beginning of the next century 50 % of the world's food supply could already be produced synthetically.

ifm's mandate:

1. Analysis and evaluation of all information on rationalisation and automation

of agriculture, from automated stables to modern agricultural machinery to the agrarian factories

2. Visits and evaluation of modern food production from agricultural factories to artificial production of food
3. Division of agriculture into industries and analysis of the needs of these industries
4. Summarised assessment and recommendations for ifm's corporate policy
5. Provision of products that prevent harm to our environment by agriculture and promote conservation.

15 billion people

do not only want to live and eat.

Technical civilisation has started an immense development which could not be stopped so easily and which should not be stopped at all. A technical industry has been created which supplies mankind with all necessary goods for daily life and which furthermore provides all the luxury goods that man needs for his so-called "lifestyle".

To list all these things, from newspapers to satellite television, from bicycle to car, train, aeroplane, and spaceship, from tooth brush to skyscraper, would

probably fill whole libraries.

One thing, however, is certain:

With all its splendid ideas — finding a raw material, using it for making a product and then selling this product in millions in order to throw it away after extensive use — mankind has forgotten one thing: Soon, there will be no more raw materials, and then there will not be any more new products, and our throw-away society will become a dying society.

Therefore it is time to interrupt this vicious circle. The first steps on the way to big recycling and processing methods have already been made.

The only way to cope with our throw-away industrial society is to turn it into a natural cycle, as it does in nature. In the same way that in nature a tree grows, dies, decomposes and thus provides the basic material for the growth of a new tree civilisation must recycle the whole of industry.

The scale of the goods to be produced for an Earth of 15 billion people reaches a multiple of today's requirements; that means that the so-called recycling industry will also experience an enormous growth rate. By means of more and modern technologies this challenge must be and will be solved.

One fact can already be noticed today: The raw materials not yet exploited are sufficient for the development of the non-industrialised countries of the Earth and for the growing population if the scrap products of the industrialised world are recycled.

To illustrate this it should be mentioned that in the Federal Republic of Germany alone every year we produce 400 million cubic metres of waste (approx. 800–1,000 kg for one cubic metre).

ifm's mandate:

1. Further intensification of the existing cooperation with the whole producing and processing industry
2. Elaboration and introduction of concepts for a long-term cooperation with industrial partners and external research institutions in the field of technical environmental protection
3. Analysis and evaluation of all information on recycling industry, reutilisation and processing of industrial waste
4. Division into industries and analysis of the needs of these industries
5. Summarised assessment and recommendations for ifm's corporate policy.

15 billion people

do not want to be immobile.

Traffic guidance systems have to be established that will make the transport of people and goods faster and safer despite the incredibly higher volume of traffic and at the same time giving special consideration to the protection of the environment.

The world that we are heading for will no longer be comparable to today's world. There will still be "rich" and "poor", but "poor" in this world of 15 billion people will mean a life with all technical achievements and all social possibilities.

Thus, it could happen that individual transport will reach a point where statistically one citizen in two will have his own means of locomotion, e.g. today's car.

That would mean that in this world there could be 7.5 billion cars or their successors. Based on the assumption that in a future world individual transport will be of the same importance as in the 20th century other, additional methods will still be required to transport people and goods.

But all these means of transportation will have one thing in common: they will be ecologically harmless. Flights in the Earth's atmosphere will be replaced by means of transportation on or below the Earth's

surface at possible speeds approaching several thousand kilometres per hour. The solutions feasible today concentrate more and more on magnetic cushion transport.

Transport between continents or around the world will possibly be carried out in tubes at the afore-mentioned high speeds (this will be physically possible with a vacuum being created inside these tubes).

Regional routes with distances up to 1,000 km will be carried out on overhead systems (on stilts) and will pass the outskirts of the big cities they are connecting.

The outskirts of the cities will be connected either by routes on stilts or below the surface by means of cabins on magnetic rail lines. These means of transportation and speeds guarantee smooth transport of many people in a short time.

In the cities individual transportation will be the most sensible solution. A solution with magnetic rail systems is feasible. The user programmes his individual destination and is transported there automatically.

Within large buildings or shopping malls vertical lifts and conveyor belts at various speeds, maybe even with seats, ensure further transport.

Long-distance individual traffic in the conventional sense will probably also exist in this world of 15 billion people, but only from the outskirts of the centres of population.

Private vehicles will be parked in large parking facilities at interchanges with the city's public transport systems so that from there individual journeys can be continued along streets with electronic traffic guidance systems.

Here as well destination, stops for sightseeing, speed, detours etc. are programmed to ensure a safe journey across the Earth.

This traffic solution allows an individual organisation of people's leisure time in a natural environment and human contact to nature. Opportunities for individual travel will be reserved exclusively for leisure and holiday time.

Freight haulage will be carried out in a similar way. The means will remain comparable. But dense underground transportation systems will pass through the big cities so that each individual building can be supplied with goods. In their basements every building will have arrival halls for a further vertical distribution of the requested goods. These goods will auto-

matically be delivered into even the smallest units in each building complex.

ifm's mandate

1. Analysis and evaluation of all information on traffic and transport systems for people and goods
 2. Division into industries and analysis of the needs of these industries
 3. Summarised assessment and recommendation for ifm's corporate policy.
- ifm's mandate is as diverse as all the various forms of development previously mentioned.

The traffic and transport system for people and goods is one of the most important fields of development for ifm.

Inside the means of transport themselves (inside the vehicles, e.g. inside the car), for the production of these vehicles and for the means and ways of transport (e.g. routes for magnetic railways) an incredibly large number of different sensors will have to be used.

Definition and development of these sensors have only just started.

ifm wants to and will extensively participate in this.

15 billion people

want to experience the opportunities

that this world and society can offer in the best possible health.

The people of a future society will be healthy into their old age. Infirmary due to illness will no longer exist. The end of a life will be determined by a failure of such parts or functions of the body which in future will remain irreparable or cannot be built up.

There will no longer be any serious infectious diseases. The almost unlimited replacement of failing parts of the body by transplants and an artificially stimulated regrowing will be commonplace. And it will be this extension of life in good health that will make life worth living.

All this will be made possible by research and development in chemistry, biochemistry, biotechnology, and microtechnology.

The technical sector will hold a substantial share in the well-being of people. To preserve life, diagnose and treat diseases will not be possible without technology.

How could a doctor even today find out whether a patient is only suffering from "stomach trouble" which might be remedied with a simple drug or has a heart defect that can cause similar pains if he

could not support and secure his diagnosis by an electrocardiogram?

Machines for diagnosing diseases, for recommending therapies, for supporting and securing the treatment suggested by the physician and for both perfectly carrying out and monitoring operations will be an essential component in the field of medicine.

In a world of 15 billion people the perfecting of technical aids in the whole medical sector is a basic condition for guaranteeing a "physically" healthy person.

ifm's mandate:

1. Analysis and evaluation of all information in the medical sector from technical aids to analysis, diagnosis, therapy and operation support
2. Elaboration of industries and their needs
3. Summarised assessment and recommendation for ifm's corporate policy.

15 billion people

expect us to hand over a clean world, full of oxygen and worth living in.

However thoughtlessly man has treated his Earth so far, in future he will have to ensure that the mistakes of the past are corrected and put in order. New pollution

and catastrophes will be prevented by continuous monitoring of all processes and automatic intervention when non-permissible changes occur.

According to a count carried out by the UN, about 150 species of birds and vertebrates have become extinct since the beginning of industrialisation. Another 1,000 species are facing the same fate. Approximately 250,000 types of plants are dying out. The layer of gas which we breathe has been and is being polluted. In Germany alone every year 20 million tons of dust, soot, and exhaust fumes are blown into the atmosphere — dirt that would fill 800,000 freight waggons.

The ground on which we grow our food was and has been penetrated by poisons. Insecticides, fluorine chlorinated hydrocarbon (CFC's, propellants in aerosol cans), fluorine, hydrogen fluoride, sulphur dioxide, carbon monoxide, heavy metal in dustfall and many other poisons are distributed world-wide through the emissions from households, from means of transport, agriculture, and industry.

The water from which we get food is full of acids and poisons so that some seafood is no longer edible and whole stretches of inland water and parts of the sea

are biologically non-viable or dead.

Apart from his hunger man also needs to provide for his thirst.

Water as the most important part of human life has to be continuously treated.

But how thoughtlessly does man handle this most important element.

Waste disposal sites are the origin of dangerous, water-contaminating residues. Chlorinated hydrocarbons (containing chlorine together with carbon and hydrogen, used in many ways in industry and households), heavy metals, acids and phosphates, bleaching agents and whiteners contained in detergents penetrate into the ground water.

In sewage plants in the Federal Republic, for example, every year 44 million cubic metres of sediment accumulate which to a large extent are used in agriculture. But this means replacing one evil with another since heavy metals and chlorinated hydrocarbons contained in the sludge penetrate through the soil into the ground water.

The amount of poison brought into the natural cycle by chemical, steel-making, and machine producing industries is so high that in a very short time international laws will have to be passed to stop this madness.

All these negative circumstances of life in the 20th century have to be cleared up before it is too late. The first signs are evident and the obvious efforts to gain control of these challenges and to clear them up bring us confidence that our world of 15 billion people as compared to today will be a clean world worth living in.

Soil, water and atmosphere as well as the complete energy production and industry will be completely monitored automatically.

It is impossible today to imagine the number of sensors which will be required to continuously register, evaluate and compare all data and put into effect the necessary steps to avoid any harm to the environment.

When setting the limits more and more consideration will be taken of the requirements of nature rather than those of industry or agriculture.

Central institutions will receive regional and national data on the environmental control directly via fixed link or radio for checks, statistical evaluation, and record keeping.

Environmentalism will become a new profession with rights ensuring direct intervention.

ifm's mandate:

ifm wants to and will contribute its share in all technical developments for creating and maintaining a clean world with a plentiful supply of clean air and worth living in, not only from its corporate point of view, but also from its general social responsibility.

Our vision gives only a tiny idea of the living conditions on our Earth within a conceivable period of time.

Yes, you have read correctly. It will only take another few decades before our population has grown to 15 billion people and part of our ideas have become reality or the way has been prepared for even more utopian solutions.

Many readers will live to experience this world and that is good because that way we can cooperate in achieving the goals of keeping this world worth living in and passing it on in a good condition.

We all share in this responsibility!

Our share in the accomplishment of a world worth living in will on the one hand be part of our personal life. Hopefully an

even larger sense of responsibility with even more consideration for the needs of our environment will develop.

Another contribution to the improvement of living conditions in a world of 15 billion people is one that we can make together at ifm based on the corporate mandate as stated in the introduction.

It is our responsibility at ifm to follow this corporate mandate and remain aware of our responsibility for a humane environment and place of work.

Our mutual chance of **growing successfully in security** will remain comprehensible and a constant motivation for all of us.

Almost every human progress has started by striving for a utopia.

At the beginning many forward-looking ideas were considered "monstrous products of a sick imagination" before they became reality.

That is why we want to conclude our vision with a quote from David Ben Gurion:

"Anyone who doesn't believe in miracles is not a realist."



2 ifm's philosophy

The employees

We want to offer our employees the possibility of a general orientation and present values that in the long run will be the basis of our corporate actions.

The term *philosophy* refers to the variety of thoughts and ideas that clearly show the attitude of the company to its employees, customers, and products.

We are firmly convinced that the employees represent the biggest asset of any company. The potential of this asset also determines ifm's power and thus determines our success or failure.

Employees and company together have to be interested in success since failure for the employee means reduction of income or even unemployment and for the company indebtedness or even bankruptcy which consequently forces the partners into a hopeless situation.

Therefore the relationship of the company to its employees and vice versa has to be open and honest in order to mutually achieve set goals.

The conditions for a trusting cooperation based on partnership are continuous training as well as hard and systematic work to achieve the goals, and an honest and unquestioning sense of responsibility on one's own initiative. Only then can the

company accomplish what it is aiming for and what in the long run will be absolutely necessary: the sharing of responsibilities amongst many people and decentralisation of the decision-making processes.

ifm shall have many decision-makers. Not only the executives of a company are crucial for the success — for that would mean that only a few would be responsible for the well-being of the company —, but each individual employee.

Exceptional success can only be achieved when the employees believe in the company and when they know that they are treated in a fair and honest way.

Only then will it be possible that each individual takes over responsibilities and produces the best possible performance for the company in an honest and hardworking way. People will respect each other knowing that everybody carries responsibility and nothing would be possible without each other. Superiors will be respected for their performance and not for their position. If it were the other way round this respect would not last.

This behaviour pays off for all employees as well as for the company.

— Work with each other and not against each other in all situations

- Treat each other openly, not dishonestly or hesitantly
- Aim at our mutual goals and not at different ones
- Help, not hinder each other.

There is no other way to permanent success. Sensible handling of success results in security and satisfaction for both employees and directors. Fear for one's job would not appear in such a company.

Customer and market

The employee is the intermediary between the customer (and the market) on the one hand and ifm on the other hand.

The customer, alone or together with our employee, develops a product requirement for solving his problems.

If ifm offers a product for solving a special problem and sells this product to a single customer a limited market has been created. The individual customer receives a product at a comparably high price.

However, it is ifm's goal to develop and offer products for solutions that have or create large markets world-wide thus achieving a production of large quantities, ensuring a continuous high quality and offering to each customer a reasonable, low-price, high-quality product. On this basis custom-made product solutions can and shall be developed and offered.

World-wide ifm employees have to develop a relationship of trust in close contact with the customer which openly and honestly considers mutual interests.

Only that ensures a long-term cooperation.

The customer has to benefit from our

special know-how, our experience, and the knowledge about our high-quality products and their applications.

In return ifm receives orders.

No customer will test a new application with a bad product and no market will be created without an intensive personal contact to the customer. In the rating of our company the customer therefore is of similar importance as the employee; no customer, no market, and no market, no company, even with the most interesting and sophisticated products.

Each employee is responsible — either in direct contact with the customer or without any customer contact because of working in the development, production, administration or any other department — for doing everything to establish and keep a large market for ifm products.

Not to forget and ignore, of course, that our existing range of products designed for large markets also creates individual needs in the customer for which we need to develop suitable solutions. This also creates new and important markets for ifm.

The product

A basic prerequisite for creating a market is the range of products. Without a range of products a customer cannot be addressed and needs cannot be met and thus no market can be created.

A company cannot exist without a competitive choice of products. ifm's range has been defined as sensing, networking, and control technology for the automation of a wide variety of processes to humanise society. All ifm products are developed in accordance with our best knowledge and experience. Long-term monitoring and worst-case tests are part of our development and quality control when products are to be provided for large markets.

The production will first develop suitable test equipment and production aids using prototypes and preproduction runs and design and adapt automatic production machinery. In small series they will then try to achieve a constant product quality to ifm standard.

Only when all given conditions have been met will full production of large series be started.

Constant product quality is also guaranteed by ifm's material handling. All parts and components used are procured in accordance with specifications; they are constantly checked for conformity with the set quality standards and are made available for production in sufficient quantities.

A substantial part of the quality assurance will be the qualification of the suppliers and the review of the adherence to quality regulations at the supplier's.

It is only this extensive procedure that results in a product as sophisticated as the one that the customer is used to from ifm and that he can also expect to get in future.

But this helps the company to keep markets open by means of the reliability that our products offer to the customer.

Quality and performance of ifm products are exemplary.

Expectations and consequences

Success will only be permanent when both the company and all staff make the philosophy the base of their activities and put mutual expectations into action.

ifm does not just stand for the company or the group of companies. ifm is not just a name.

ifm — that is all of us.

We all live on ifm's success.

We are all in the same boat going in the same direction.

Our dream for this company can only come true when we set down to work with energy, optimism and without authoritarian ideas and arrogance and with a clear motto.

This motto for each and every one of us is:

"I can do it!"

That means

- that each individual employee on his own takes the initiative in the sense of the corporate philosophy
- that each individual employee thinks and thinks ahead in the sense of the corporate philosophy
- that each individual employee works intensely and with commitment in the sense of the corporate philosophy because he has discovered the sense of what he is doing
- that each individual employee in the sense of the corporate philosophy is willing to help, and conveys that to others
- and finally that each individual employee is willing to take over responsibility to fulfil the corporate philosophy.



3

Corporate principles of ifm electronic

3

Corporate principles of ifm electronic

Guidelines for
activities and conduct
of the company
and its employees

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The company

ifm will always be true to its origins

•

ifm wants to offer outstanding product quality, service, and reliability

•

We mean what we say and we act accordingly

•

ifm's intention is to be an international company treating the world as a single market

•

We want to grow successfully in security

•

Corporate mandate

ifm promotes the optimising and/or solving of technical processes by offering sensors, system communication, controllers, and engineering services in all markets all over the world

ifm is striving for success by establishing and keeping uncomplicated entities which work independently, in their own responsibility, and successfully

.

ifm considers itself a market and customer-orientated company. The market provides better answers than all management theories

.

We do not want to be restricted to considering things from only one angle. Low costs without quality and service are as bad as quality and service that cannot be financed and leave no profit. However, we will always meet special requirements with special attention

.

ifm intends to be an optimistic company. Optimism demands action, pessimism is an easy excuse for being idle

Market

ifm is a globally orientated company. The centres of our activities and investments for the foreseeable future will be in America, in Asia and in Europe. However, we will not close our minds to opportunities in other markets

.

ifm does not only intend to cover visible needs, but also directly creates needs by demonstrating new applications

.

ifm is looking for the best possible structure of representations and ifm engineers for the sales work in America. Devotion and loyalty to our representatives are of equal importance as a direct, continuous setting up and extension of our own sales organisation

.

ifm wants to expand consistently in Asia. The unique features of this market demand extraordinary efforts in providing specific products at competitive prices. ifm will be prepared for these demands

ifm will try to transfer the concept of the sales network in the Federal Republic of Germany with its branch offices and area offices to other countries taking into account specific national requirements. Continuous communication with the branches shall help to further optimise the sales system

•

ifm has a special attitude towards its customers. We will continuously try to make this special attitude clear to all our staff — no matter in which part of the company they might work. Each employee — whether directly or indirectly — is a sales person

•

ifm wants to provide exemplary active customer service as a matter of course

•

In continuous, intensive training ifm wants to prepare its staff in technology and sales for the growing and often changing customer requirements and thus ensure a flexible, innovative reaction to changes in the market

Technology

ifm intends to work exclusively in product areas which are technically comprehensible and seem manageable with our level of knowledge

.

In principle ifm wants to be able to offer products world-wide

.

ifm wants to achieve and keep a reputation as a technically flexible, innovative company

.

Continuous high expenditure for research and development together with a high level of commitment shall consolidate our technological lead as compared to our competitors and strengthen our position in the market

.

Investments into own production technologies such as the film technology and the modular technology will also be promoted in the future in order to produce efficiently on a high quality level

A manufacturing process supported by data processing and connected by network to other parts of the company shall ensure high flexibility and optimum quality

•

High product quality and accurate technical data are unimpeachable values of ifm

•

Quality must be part of our lives. All ifm staff need to be a living proof that only perfect ifm products exist

•

Quality and cost discipline, in our opinion, are not contradictory, but complement and promote each other

•

Flexible material-handling is a prerequisite for a flexible production

A basic mandate of material-handling is therefore to avoid any kind of waste

.

In principle ifm will not develop, produce or sell products which directly serve military purposes

.

We need ifm-orientated pure research seeking cooperation with external institutes, universities or large industrial companies in order to gain progressive knowledge

.

Product developments at ifm follow a strategy which can be maintained and justified in the medium run. Diverging and sudden market trends and competitive developments should not lead us to just copying competitive units without thinking and without our own marketing concept

Capital

ifm intends to create security and independence by means of an equity capital suitable to the size of the company

•

Profit is an indispensable reward for the performance of a company

•

Growing profits are a necessary prerequisite for a secure growth

•

Profits are ploughed back into the company by the partners in order to create the necessary funds for the capital requirements of the company

•

Increasing returns can be better than reducing costs

•

The performance of each individual increases or decreases the success of ifm. Each employee shares in the responsibility for the success of the company

Advertising

ifm's advertising has to be truthful

.

ifm's advertising should be clear, meaningful, innovative, aggressive, and of high quality

.

The ifm group of companies and its range of products and services need to be promoted in advertising as one unmistakable concept

.

ifm identicom and all companies belonging to the ifm group of companies have the joint obligation to build up and keep an intensive, image promoting cooperation

.

This cooperation is based on the tolerance towards country-specific differences in advertising and the respect of the central responsibility of ifm identicom to their form and quality level

Survival

Each growing company has to take risks to work successfully. Partners and management will only take such risks that are in the interest of normal business activities and the size of which is suitable to ifm

•

In a competitive market there is no security without continuous struggle. ifm is prepared for this

•

Partners and management will endeavour to make ifm's structure concerning range of products, customer variety and size, and variety of industries as secure as possible in order to be able to meet world-wide changes in the economic situation and different developments of the individual industries in a flexible way

•

Partners and management are aware of their responsibility to make use of the experiences of the past in order to master the future

The employees

We respect each individual employee

•

All employees appreciate human sympathy. ifm feels committed to this principle

•

Motivation of employees starts with setting goals. If these goals are attractive and attainable they will act as motivators. Goals outside our reach lose this function

•

Each employee is a source of new successful ideas. ifm wants to promote the realisation of new ideas by supporting the willingness to take risks and by understanding and accepting unsuccessful attempts

•

ifm wants to have independent employees. Independence is based on discipline.

Discipline means to accept our common understanding and to observe the guidelines that constitute our scope of action

•

ifm guidelines are positive. Employees are not restricted by rules, but encouraged to understand and use their scope of action

•

Through their conduct employees become positive, unmistakable flag bearers and ambassadors for ifm world-wide

•

ifm has multinational executives and employees and is prepared to accept the ways of life and cultures of the individual countries

•

ifm trains young people with the goal of offering them a secure, interesting, and challenging job

ifm wants a long-term relationship with its employees and promotes and encourages their abilities and willingness for their career within the ifm group of companies

.

ifm offers secure jobs for all employees. ifm wants to overcome temporary fluctuations in the job market depending on economical developments at the cost of the result, not at the cost of job losses. This does, however, not mean a job guarantee at all cost. In the case of bad structural developments in the company or of long-term changes on the market the management is obliged to take countermeasures in time for the benefit of the whole ifm, even if this would mean a reduction of jobs

.

Sound leadership in management is based on comprehensive information. ifm executives and employees have the right to information. However, they also have the duty to keep themselves informed

Executives and management

In their personal conduct ifm executives should set examples for all employees

•

ifm executives are critical and self-critical

•

ifm wants to establish a real, functioning basis of trust between management, executives, and employees by providing comprehensive information and by a constructive exchange of opinion with the competence to make decisions

•

Executives have to promote their ideas, also and especially with their employees

•

A little bit of futurology is necessary for executives

•

Everybody needs praise and recognition — employees and executives

It might be possible sometimes to buy the employees' sympathy. However, it is not worth much if it is not given out of people's own free will

.

ifm executives are prepared to delegate responsible jobs to their staff. Delegation of tasks demands and promotes trust and sense of responsibility. ifm executives are not afraid of endangering their own position by delegating; they free themselves for new challenges

.

Executives and employees keep agreed arrangements and respect set dates

.

It is a matter of course for management, executives, and staff to cooperate in harmony. Constructive disputes might arise in discussing an objective solution of problems; they should, however, never hurt people's feelings

Nobody at ifm, neither superiors nor staff, has only rights. Each of us has to be aware of his duties

.

ifm employees assess themselves and are assessed on a regular basis in accordance with uniform, transparent standards. The results of the assessment are compared and openly discussed with each employee and used as a basis for promoting this employee

.

Regular training is intended to form, challenge, and promote executives and employees in all parts of the company

.

Organisation

By accepting and respecting others ifm creates the prerequisites for a permanently simple, efficient organisation

.

Organisation is a service for the employees. It should amount to nothing more than a few important basic rules and clear responsibilities

Organisation for us means:

Fight bureaucracy

•

Organisation needs to simplify and minimise interfaces in the company

•

Centralisation and decentralisation need to have their justification at ifm

•

Organisation needs to combine special knowledge and experiences of employees. This means willingness to be flexible and mobile concerning the forms of organisation

•

The organisation — and this includes IT — must never exist “for itself”. It is and remains a “service” institution “promoting” the cooperation of employees

The corporate image

ifm wants to promote and keep an intensive, lively business culture

.

By means of an independent, unmistakable style in the conduct of its employees and in the image of the company ifm wants to make the corporate principles clear and understandable for everybody

.

We want our ideals concerning quality, product and the customer to be unalterable. They are accepted as binding by all ifm employees without compromise and are the permanent basis for their activities

.

ifm representatives are good listeners. They shape the image of ifm by the way of their appearance and by their outer appearance as well as by their missionary enthusiasm and commitment

ifm demands and promotes ecologically
conscious decisions and conduct

•

ifm tolerates civic involvement

•

ifm intends to be a moral company

