

Y2k 18217

Technology



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The Y2K problem : A global threat or a business opportunity?

It is a couple of minutes before the midnight on 31st of December 1999. A huge mob of people is standing on the Times Square in New York. Many of them are drunk, everyone is happy, everyone is singing and dancing. Dressed up, in good mood, the people are waiting for the year 2000. Then the last minute of the year shows up on the large clock. People start to countdown - 10, 9, 8, 7, 6, 5, 4, 3, 2, 1... Suddenly, the electricity collapses. There's dark all around. People start to panic. Fear and chaos starts to spread all along the East coast. As the time goes on, disorder and confusion rules in the whole United States, in the whole World.

This was one of numerous apocalyptic visions of the New Year's day. As the idea of the Y2K problem first appeared, these visions were more common and more often to see in the newspapers, magazines and TV shows. The millenium bug was never officially discovered and described. It just showed up as a hypothetical thing. Then the tests begun. Almost nobody paid attention to it that time. First in the 90`s it has become a proclaimed threat. Big businesses, governments, armies, but also households and small shops has started to worry. The Y2K has become a symbol of upcoming electronic chaos.

The millenium problem definitions vary from one to another. The very basic refers to older computers who used two-digit convention to represent the year. According to MITRE Y2K Team this showed to be a real problem in the late 60`s, when the IBM 360 had difficulties in handling of the dates past 31st of December 1969, so they started collapsing after midnight local time.

The other day IBM recommend to set a different date to fool the computers temporarily (Frederickson, J. 1999). This problem was accidentally caused by the constructors and programmers of microchips, computers and software, because they have used the two-digits to represent the year. This thing was implemented to almost all electronic devices which used or displayed date. (Christie, B. 1999)

There is a simple example of the possible two-digit mismatch. A computer has worked out the value of money transferred in or out of a money account based on the following simple calculation.

$$\text{VALUE} = (\text{YearNextYear} - \text{YearRightNow}) \times \$1000$$

If the hypothetical computer uses a four-digit dates it will transfer this amount into the particular account.

$$\text{VALUE} = (2000 - 1999) \times \$1000 = \$1000$$

If the computer is not Y2K compliant, the system will debit the account.

$$\text{VALUE} = (00 - 99) \times \$1000 = \text{MINUS } (-) \$99,00$$

This is a demonstration of the problems that millenium bug could cause. Not only software but also hardware components of the computers are controlled by date. So the problems could occur also as a hardware failure.(Christie, B. 1999)

The year 2000, as it is a leap year, may bring more of the problematic situations. Another problem is that in this year there is an additional date - 29th of February. According to John Koskien of the Y2K`s Council`s <https://assignbuster.com/y2k-18217/>

Information Coordination Center the glitches would affect mostly software. He said that there are numerous ways to make clear what is a leap year, there is a chance of some programs lacking the code to calculate the last day of February. This could affect banks , payrolls and interest calculating. (Broder, C. 2000).

Another problem that could occur is in the number of weeks. Almost every year has 53 weeks, in some of them 51 or 52 are 7-day weeks. With a 364-day years the number of weeks would be exactly 52. Unfortunately, as the years have 365 days, none of them has less than 53 weeks. This year has one week more. Such event appears every 28 year, so it means that the last 54-week year was 1972, long before the today software and hardware systems were developed. Allegro Consultants, Inc. , who has been working on the Y2K problems for many years, claimed that many programs have coded only 53-week years. According to this company, some programs restrict the user to enter a number of week no higher than 53. Another proposed problem is that range-checking programming languages like Pascal could abort or use incorrect information. This could lead to failures and even damages.

The problems that could have occurred are of different size and seriousness. From a simple malfunction of an old alarm clock radio to a nuclear plant meltdown. Because there are dates used almost in every system, in every computer the Y2K should have affected a number of different systems. The first Y2K indication was a computer misread of the date, when the 00 would appear as a 1st of January 1900. This wouldn't be such a big problem, but the computer software, especially accounting and statistics software, could

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calculate false date and consecutively malfunction. Such software is used in many institutions like airports, hospitals, banks, governments and army. It is not difficult to imagine what a software failure could do to an airport or a hospital. As nowadays these are wired together via the Internet or another network, the electronic apocalypse could easily spread along. The problems were significant and clear and there was a good reason to invest to protection.

However the reason was good, the investments were well excessive. According to Robin Guenier , the executive director of Taskforce 2000, the cost of all this might have exceeded 400 billion British pounds sterling. He claims that only the World War II could cost more and that this amount of money is enough to pay up a big part of the developing countries debt. He also says that commentators are doubting the necessity of these investments or even that all this was a hoax.(Guenier, B. 2000) A really serious attention was paid but the money spent were excessive.

During the year 1999 the millenium bug has become more of a business matter. Mr. Guenier claims that the media did not pay attention to the substance of the problem. He says that the real thing was boring for the news. The media showed interest only when the first myths evolved. Suddenly, there were stories about planes crashing, nuclear disasters and exploding microwaves. None of the experts was able to make an exact prediction, but the myth was alive(Genier, B. 2000). As the time went on almost in every newspaper was a small place where the remaining days were shown.

Businesses smelled a great opportunity and a big campaign started. Y2K was a topic of TV debates, newspaper articles, shows and advertisements. All this started to make pressure especially on computer users. The yellow label showing that this software package or this new computer is Y2K ready has become a standard. A number of testing programs and survival guides for the new millenium appeared on the market and enjoyed a high customers interest. The Internet was bombed with information about what horrible can happen to an old computer or an old microwave. All this created a great opportunity for software and hardware producers.

The most important customers were the institution like banks, insurance companies, electrical plants, but also governments and armies. This was a quite a bit of the market share.

The cost of the preparation varied from one to another. British Telecom has spent L350 million, not a very big part of their budget. The top 100 companies in Britain has spent on average L60 million (Guenier, B. 2000).

The military preparation were more interesting. Russian army had to watch a large number of nuclear warheads and invested \$4 million. The US army in a similar situation had invested almost \$4 billion. The estimated cost of the Y2K readiness in USA was \$100 billion (Time, 2000).

Consequently, as the date changed, a question showed up - What did really happen?

Well, there is unfortunately no complete report yet of what happened after midnight. It is because the institutions that are monitoring systems are waiting for the 29th of February to give complete reports. But one thing is for <https://assignbuster.com/y2k-18217/>

sure, the impacts were only minor. No plane crashes or riots or nuclear leaks were reported. The celebrations were happy and without problems all over the world. There was a big show in every larger city. Red Square in Moscow was crowded with people to see the giant fireworks and Russia's new temporary president Vladimir Putin. In Paris 11 Ferris wheels were running all night, In Giza, Egypt, the famous musician and showman Jean Michael Jarre used the pyramids for a spectacular light show. In London the celebrations were a bit of a chaos. The giant Ferris wheel, which was built for this night wasn't finished yet. The fireworks started a bit late, because the Queen wasn't able to set up the ignition right. In Times Square in New York two million people met to see the ball drop and to have a big party (Time, 2000). The birth of the new year was unexpectedly calm and without significant problems.

It is hard to decide whether the millenium bug was a real problem or just a hoax. The Y2K czar John Koskien was invited to the White House to celebrate the victory. The spokesperson said that the corporations have spent the money reasonably compared to the seriousness of this problem (Krebs, B. 2000). So there is nothing to worry about. According to the officials, the investments were necessary. The countries that did not invested such sums have also survived the year rollover. The experts claim that these countries are not so much dependent on the electronic systems and a possible failure wouldn't have such impact as it could have had in the US. This might be true, but the topic is still open.

The Y2K problem was interpreted in many ways, but almost no one was able to give an exact prediction. But it showed the whole world that there is not a

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clear relationship between the computers and the society. According to Bill Guenier, the society is probably not so dependent on the technology than experts thought. The people are not living in the digital age yet. The people has to understand these matters, or more problems will show up when the digital age arrives (Guenier, B). 2000).

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Word Count: 1725