

Y2K: A Byte Out of  
Time, 1999

Y2K

```
def load_data():
    # load the data
    data = json.loads(data)

    # access the contents of the
    # JSON["metadata"]:
    print(json["metadata"] ["title"])

    # access the number of events, plus the
    count = json["metadata"] ["count"]
    print ("%d" % count) + " events recorded")

    # for each event, print the place where
    for i in json["features"]:
        print(i["properties"] ["place"])
        print("-----\n")

    # print the events that only have a magnitude
    for i in json["features"]:
        if i["properties"] ["mag"] >= 4.0:
            print ("%2.1f" % i["properties"] ["mag"])
            print("-----\n")

    # print only the events where at least 3
    print("Events that were felt")
    for i in json["features"]:
        feltReports = i["properties"] ["feltReports"]
        if feltReports != None:
            if feltReports > 0:
                print ("%2.1f" % i["properties"] ["mag"])
                print("-----\n")
```

MUNUC 37

Model United Nations of the University of Chicago

## CHAIR LETTER

Dear Delegates,

Welcome to 1999, where we are impatiently waiting not for our Snake game on the Nokia 3210 to load...but for the END OF THE WORLD! My name is Veda Swaminathan, and I am so excited to be your Chair for Y2K: A Byte out of Time, 1999. We have an amazing slate of conference executives and assistant chairs, and I am really pumped for you to meet Sarah (your CD) when the conference starts! I hope you are just as excited to attend MUNUC 37, discuss our topics, and have fun while resolving some of history's most important conflicts.

I am currently a third-year at the University of Chicago and originally hail from Connecticut. I have been doing Model UN since I was a freshman in high school and met some of my closest friends through this activity. I had a blast staffing MUNUC 35 where I was an AC on the 1906 Iranian Constitutional Revolution committee, MUNUC 36 where I was the Crisis Director for the Joint Crisis Committee on the Meiji Reformation, and ChoMUN where I AC-ed the 1200 Chola Empire committee and AC-ed the Museum of Natural History committee. At UChicago, I am studying Economics & Public Policy, and am very passionate about international relations and world history. Outside of MUN, I am a member of a few finance organizations, social impact organizations, and a boxing club on campus. I also run a non-profit organization outside of school dedicated to the development of small businesses through the use of high school talent. In my free time, I enjoy hanging out with my friends, spending time in the cities near me, walking my dog, and listening to (live) music! If you have solid music taste, send me some recommendations!

I am really excited about the Y2K committee because it was one of those things I always heard my parents references and would think they were talking about the fashion trends! In reality, it is one of the biggest "non-events" of modern history and something I really want to learn more about. Given that our generation has grown

up with so much technology, I think it will be super cool to dive into a time when technology was just blooming. There are so many exciting things to debate in this committee, from technology regulation, to advancement, to international (tense) relations and more. I can't wait to see how you delegates take the conversations!

I am excited to facilitate debate in a Crisis committee this year — having CD-ed and chaired several times in my seven years of MUN experience, I love the fast-paced nature of a crisis committee and how much fun everyone has. I highly recommend you read through the section of the background guide for a more in-depth explanation of committee mechanics, especially regarding notes, timed crises, and more.

Sarah, the rest of the team, and I are thrilled you've joined our committee! We know not everyone has the same level of MUN experience in this room, so please don't hesitate to reach out to any of us with questions, comments, or concerns before or during the conference. MUNUC prides itself on being a learning conference, and we are excited to help you grow as delegates through this experience.

Best of luck,

Veda Swaminathan

*Crisis Director*

[vedaswaminathan@uchicago.edu](mailto:vedaswaminathan@uchicago.edu)

## CRISIS DIRECTOR LETTER

Hey everyone,

My name is Sarah Kress, and I will be the Crisis Director for Y2K: A Byte out of Time. I am a fourth-year chemistry major, and just like my study of chemical bonds, I hope to form some bonds with all of you over our shared love of history and technology! This is my fifth year of MUNUC—I started out as a delegate, and I'm super excited to be your CD for my last MUNUC! Outside of MUN, I spend most of my time in the lab, but I also love ice skating and swing dancing!

I've always been interested in history, and I'm stoked to see how all of you work to maintain stability during a time of such rapid change. Not only will you be dealing with the Y2K crisis, your committee will be asked to consider technological advancement, in particular the rise of the internet, on a truly global scale. With such a diverse group of characters, I'm interested to see how you'll resolve your differences and fit together like Tetris blocks to serve the greater good.

I'm looking forward to seeing how your arcs evolve during our totally fetch committee—with these characters, this iconic era, and a good dose of creativity from all of you, I know that this committee will be able to withstand all of the chaos that I'll be throwing at it (what, like it's hard?)!

If you have any questions, don't hesitate to reach out!

XOXO,

Gossip Girl

(aka Sarah Kress)

Crisis Director

skress@uchicago.edu



## SENSITIVITY STATEMENT

During the late 1990s and early 2000s, there were many incredible advancements in technology, international relations, and history. However, there were also atrocities committed around the world from terrorist attacks to gun violence, and more. The turn of the millennium marked the demise of countries and the rise of many new ideologies.

Know that we will not tolerate any behavior related to racism, discrimination, sexism, and any other ideology which is meant to exclude another group of people, whether in your private notes, in directives, or outside of official committee time. There is ample room to explore ideological differences between characters while still refraining from connecting your arc at all to your characters' or to civilians' ethnicities or religions. Even if you are to believe that your character is opposed to cooperation with foreign powers or otherwise antagonistic towards political groups, solving the Y2K crisis and the challenges associated with the rise of modern technology does not necessitate violence against other identities.

While discrimination against minority groups was well-spread and accepted in many places during this time, please keep in mind that we are running this committee in the 21st Century. Using historical "accuracy" as an excuse to be discriminatory towards other demographic groups will not be tolerated in this committee.

Keep this in mind as you craft your arcs.

## COMMITTEE STRUCTURE AND MECHANICS

Given that this committee is a Crisis Committee within the Crisis USG group, we want you to be prepared to engage with both frontroom and backroom elements in committee. We recognize that delegates may not have experience with crises, so we want to provide a little background on what this committee will look like and give you an idea of what to prepare for. MUNUC has excellent training modules available on our website for more information.

Genuinely, don't hesitate to reach out to your CDs and/or Chairs if you have any questions! We would actually love to hear from you if you have questions!

### Elements of Crisis Committee:

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Crises are committees that usually take place in special settings, such as during a historical or futuristic time period. For this committee, we will start in 1999, right as computer scientists realize that global programming may not be able to handle the switch to the year 2000. This international scare is called "Y2K". Because of how catastrophic this event could become, an international committee has been assembled to try and prevent it. Thus, as delegates in this committee, you will serve as members of the Council on Y2K, which will include mid to high level politicians, tech moguls, computer scientists, innovators, and much more. Though the characters differ wildly, all delegates will start with equal standing and opportunity for influence. That can and should change as you develop your arcs. This is because every Council member has a unique background, interest, or expertise that should guide them towards accomplishing different goals.

Some MUN basics that we want to highlight are that this committee will feature both frontroom and backroom elements. Frontroom is the committee room where moderated caucuses, unmoderated caucuses, round robin speeches, public directives, and resolutions will take place. During this conference, we will have a

few sessions where public directives, or short-form written solutions, will be passed before we culminate in a session where a resolution, or long-form written solution, will be passed. Public directives are 1-2 clause solutions to a recent topic of debate or crisis update and must go through formal voting procedures to pass.

Backroom is where you will engage with your backroom staff (CD and ACs) as well as the opposite room. Your goal here is to build your character arc, the path to accomplishing your final goal. Think of this as a story in which your character is the protagonist and you have to gather adequate resources, develop relationships, and use both of those to gain power, money, or something else that will put your character in a better position than where they started. To achieve this goal, you will write private directives or notes detailing steps you intend to take. Your notes should be as relevant and impactful to the committee as possible. The closer they are to that ideal, the more likely your CD is to break the note. This means, they come to the frontroom to perform a skit where they reenact part of your note and show you (and committee) how your actions fit into the scope of the committee “story”. You may not get credit at the moment for your actions (because you’ve told us to keep it a secret), but seeing your crisis arc pop up in a break generally means you’re doing a good job and are on the right track. Joint private directives are notes to the backroom written by 2 or more delegates where they combine their resources to accomplish a larger goal without the approval of the whole committee and can also be made into a break by the CD.

Our committee will set a note-run time in the beginning that will remain flexible throughout the conference. Note-run times mean that after X minutes (typically 20 - 30 mins), the backroom staff will come back to committee, collect the private directives delegates have written, and will return the private directives they have responded to. Some of these note-runs will include crisis breaks/updates and some of the updates will be independent.

Crisis committees tend to follow something called a crisis cycle which is roughly the same time as the note run. Breaks kick off a crisis cycle and give delegates something new to debate or think about. As the committee begins moderated caucuses, delegates should be writing notes or public directives simultaneously, proposing them as solutions, and rallying the committee support these solutions. The Chair would like to see a few moderated caucuses before entertaining an unmoderated caucus to finish writing. Then, the committee generally moves into a voting procedure where committee members decide whether or not to pass the directives on the floor.

Delegates' goal should be to use their character powers to take an action that will affect the entire committee. By keeping this goal in the back of your mind, we can ensure that our committee is as delegate-driven as possible. We want to give you the space to be creative!

To explain the special mechanics of a Crisis, we will use a sample Crisis to illustrate some of the things you may see. In this example Crisis, let's imagine a committee about "The Queen's Cabinet". The Queen's Cabinet receives a request from another country to fund their expedition abroad. Each delegate in the room will have to decide how their character would fire that request, come up with a public and private action plan around it. Some may say funding another country is good for international relations. Others may say that it's not a worthwhile use of national resources. Delegates will have to write a directive (the public action) to address the request, and should think about how to leverage it in the backroom so that their character is able to accomplish their goals (ex. Do you figure out how to build your own relationship with the king of the other country while funding them? How will that relationship help you in the future?).

Delegates will have time to debate the public action plan in the frontroom before writing the directive. Note that multiple directives can be submitted if there are opposing ideas.



We are so excited to see how you handle a crisis committee. Asking us (your executive slate) questions at any point during the conference will never affect awards and we want you to balance learning a lot with having a blast this weekend!

## HISTORY OF THE COMMITTEE

The Council on Y2K was founded on April 3, 1994, by the members of this committee to prepare for the upcoming Y2K crisis. Following Peter de Jaeger's article, "Doomsday 2000," the members of this Council were inspired to take action. After receiving several faxes from concerned parties, Jaeger formed this Council, a unique set of politicians, tech moguls, and even celebrities from around the globe united in their dedication to preparing the world for the crisis known as Y2K. Although this Council is not a government in the traditional sense, lacking citizens, a military, and a national treasury, it is no less equipped to deal with the problem at hand. The global nature of the Y2K crisis demands a global response, and the members of the Council are determined to use whatever resources they have or can build over the course of this conference to cement themselves as leaders in the technological age by solving the Y2K crisis.

In recent years, the world has grown increasingly concerned about the impending crisis. Governments have formed committees dedicated to Y2K preparedness, and companies have set aside departments to ensure that the bug doesn't interrupt operations. However, efforts have been largely unorganized up to this point, and several important figures remain outside of the global conversation.

Since its founding, the Council has had numerous productive conversations about how best to prepare for Y2K, from increasing awareness of the problem to avenues for equitable installation of solutions. However, as the new millennium draws closer, the time for decisive action has come. The Council needs to establish clear responsibilities for its members and develop the resources necessary to effectively stop the Y2K crisis—and they only have a few months! Time is this committee's biggest enemy as the crisis rapidly approaches.

## History of the Problem

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While the theory behind computer programming was developed in the early 1800s, with the first examples of binary as a way to represent numbers, and what is often thought of as the first computer program was written by Ada Lovelace in the 1840s, electronic computers didn't make their way into the public domain until much later. The world needed to wait until 1947, when Bell Labs successfully used its transistor for the first time, an instrument that helps control the flow of electricity in a circuit. This revolutionary invention allowed for the development of digital computers, which, over the next few decades, would make their way into almost every part of human life.

In the 1950s and 1960s, digital computers were only used for military or governmental applications. One of the earliest purchasers of digital computers was the U.S. Navy, whose interest in the technology stemmed from the codebreaking capabilities of computers used by the Allied Powers in the Second World War. Technological advancements in the mid-20th century were also driven by the Cold War, with the West focusing their efforts on surpassing the Soviet Union and their allies in the development of computer technology, from new codebreaking strategies to the pivotal role that new computer technology played in the early exploration of space and the first moon landings.

As the mechanisms by which computers carried out their algorithms moved from analog methods to digital ones, programmers also sought to create new ways to store memory. From the mid-1950s to 1970s, the dominant method was magnetic core memory (a name whose shortening, "core," persists in our discussion of computer memory storage, although the technology is no longer used), where toroids (coils of wire with current running through them) would be set with either clockwise or counterclockwise current, with the opposing magnetic fields generated from the circular current indicating either a 0 or a 1. While this method was invaluable in allowing digital computers to store memory, it was also resource-intensive, bulky, and costly, as only a small

fraction of the data necessary was stored in each toroid. As a result, programmers had to economize on the type and amount of data they stored. The mechanism of memory storage for early digital computers is one important reason why dates were stored as two-digit numbers, like 47 and 56, rather than four-digit ones, e.g., 1947 and 1956. Programmers at the time, although we may accuse them of being short-sighted now, simply assumed that when the necessity for the use of all four digits arose, so much would have changed about data storage and computers themselves that memory storage techniques in the first computers wouldn't be relevant.

In a way, those programmers were right. Magnetic core memory storage was replaced with dynamic random-access memory, or DRAM, a system that takes advantage of the two possible states of a capacitor, charged and uncharged, to encode a 0 or a 1 in binary code. This method was termed dynamic because of the relative ease at which capacitors can be charged or uncharged in the simple capacitor-transistor circuits used, in contrast to changing the direction of current in the toroids described above. A far more compact and efficient technology than magnetic core memory, DRAM, often just called RAM (as static random access memory is less often used), quickly became the standard for memory storage in digital computers and remains that way today.

Computers have proved their usefulness in various military and mathematical applications, but what about their potential impact on everyday life? Companies that developed computers worked to commercialize the technology starting in the 1950s, and one of the first (and arguably, most impactful) applications of digital computers for the common man was the digitalization of banking. The first successful ATM was at Barclays Bank in 1967 in the United Kingdom, although a similar machine in Japan that was designed to dispense loans rather than a user's own funds was used briefly in 1966—but the technology didn't catch on there at that time. The technology for ATMs was also developed concurrently in Sweden, the U.S., and by various other European countries. By the early 1970s, ATMs were ubiquitous in the West, and more and more financial transactions were moved to credit cards and the digital world, although cash still remains predominant in most of the world today.

Beyond the use of ATMs was the gradual movement of several mechanical processes to automated ones, a shift termed the Digital Revolution. One of the most significant changes was in data storage. From financial information to government records and flight schedules, paper records were slowly being phased out. Data entry specialists were hired across the Western world to help transfer analog records to digital ones, and typists and computer programmers became increasingly important roles in any company.

While digital computers found their start in commercial applications, the idea of an individual computer became increasingly popular in the 1980s and continues today. Video game consoles made their way into homes, electronic music rose in popular culture, and the first (sometimes lampooned) CGI editing and special effects techniques appeared in well-known films. As companies became dependent on computers for day-to-day operations, more and more households in the West purchased computers for their own use.

The year 1991 was pivotal in the development of computer technology as we know it today. In Finland, and quickly throughout the rest of the Western world, the first commercially available digital mobile phones were sold, connecting people not only to each other but also to the Internet itself, which became public in the same year. The new accessibility of the Internet led to bulletin boards, where people from around the world could post on certain topics, and the first instant messaging systems. The ability to near-instantaneously connect with people on the other side of the globe was unprecedented and, in its current form, is seldom regulated. While the spread of ideas through those with access to the Internet is currently limited to those in developed nations or richer classes, globalization grew rapidly. Access to new ideas and information has also been aided by new search engines like Google, which launched just last year, in 1998. Equipped with this newfound ability to spread information quickly, this committee is tasked with effectively communicating its findings and its plan for action to the entire world—including those who don't currently have Internet access.

While much of the development of early digital computers centered around the Western world, other developing countries are no less important in our discussion of the Y2K crisis and the rise of the Digital Age in all parts of the world.

The late 1990s witnessed a significant transformation in the global technology landscape, with Southeast Asia, particularly India, emerging as a central hub for information technology and call centers. India saw an explosion in the use of call centers, driven by its vast pool of English-speaking talent and cost-effective labor. This shift was a direct response to the growing demand for outsourcing services from Western companies dealing with the Y2K problem. Indian firms like Infosys and Wipro leveraged their technological expertise to offer crucial IT support and remediation services, solidifying India's position as a key player in the global tech industry. The expansion of call centers not only helped address immediate Y2K-related challenges but also marked the beginning of India's ascent as a dominant force in the information age.

East Asia, encompassing leaders in technology like Japan, South Korea, and Taiwan, played a pivotal role in technological advancements during the late 1990s, particularly in relation to the Y2K crisis. Japan, with its innovative technology firms such as Sony and Panasonic, was instrumental in developing both hardware and software solutions to address the Y2K bug. South Korea's technological achievements, driven by conglomerates like Samsung and LG, contributed significantly to the creation of Y2K-compliant systems and components. Meanwhile, Taiwan's semiconductor industry, led by companies like TSMC, provided essential microchips and components critical for maintaining global technological infrastructure. The technological advancements and contributions from these technology leaders were vital in ensuring a smooth transition into the new millennium and highlighted their growing influence in the global technology arena.

In contrast to the rapid technological advancements seen in Southeast and East Asia, many developing nations faced considerable challenges with the Y2K problem due to limited exposure to and adoption of



computer technology. In these regions, including parts of Africa and Latin America, the immediate priorities often centered around more pressing issues such as food security, poverty alleviation, and disaster management. As a result, the adoption of computer technology and efforts to address the Y2K bug were less prevalent. Governments in these areas focused on addressing urgent survival needs rather than investing in extensive technological upgrades, which left them vulnerable to potential disruptions from the millennium date change. This disparity in technological preparedness underscores the broader challenges faced by developing nations in the global tech landscape.

However, with the rapid rise in the use of computers came a rapid rise in distrust of technology. Science fiction novels such as *I, Robot* by Issac Asimov and popular films like *2001: A Space Odyssey* inspired fear in their viewers that computers might one day become sentient and, consequently, unhappy with their position serving humans. Imagining a world where the technology we created to be intelligent beyond our capabilities and for them to one day have the capability to outsmart us is a natural human reaction to a quickly evolving world, and it importantly changes the way that much of the population interacts with computers. A resistance to modern technology is as old as time, and in this case, the protest is against digitization and a dependence on computers. Groups like Neo-Luddites, who aim to slow or stop the development of digital technology, have entered into conversations on the world stage. Their fears, often dismissed as ramblings, may simply represent an extreme case of the viewpoint that the way modern technology has changed our world is getting out of hand. As technology moves forward, we need to consider more carefully the soundness of the infrastructure being put in place, as well as our protections against the stealing of data, misinformation, and various other forms of cyberattacks. As it seeks to solve the Y2K crisis, this committee will also be met with the larger implications of implementing protections in computer technology on a global scale and whether private users are willing to accept such intervention.

## Statement of the Problem

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1993. An essay, published in a small magazine, suddenly goes viral. Doomsday 2000 it reads...Doomsday is coming for us all...

This publication set into motion a global frenzy that brought this Council together. As computer scientists dug deeper into what they deemed the “Y2K bug”, they realized that the technological mainframe holding the world together would shatter when the clock struck 12:00 am on January 1st, 2000. When the clock strikes midnight, many, if not all computers that hold the fabric of our world together will crash, thinking that we have traveled back to the 1900s. Credit card companies, banks, energy companies, medical devices, and even elevators are among the industries or objects at risk. Everyone around the world is affected by Y2K, from the most connected to the most remote of civilizations. Computers that are affected by “bugged” programming are expected to crash, causing massive problems for critical industries like banking, utilities, communications, insurance, manufacturing, and government. Defense systems would fail, planes would fall out of the sky, weapons systems would launch, and chaos would ensue across the globe.

The root of this problem starts with the fact that computers of 1999, the present day of our committee, are riddled with frighteningly ambiguous programming, especially when it comes to the representation of dates. Due to a shortcut that computer programmers took in the 1960s, time has always been denoted in two digits—i.e. 1926 is “26” to a computer—so, computers can’t quite tell what the difference is between years like 1626 and 1926<sup>1</sup>. This issue is especially pertinent as the year 2000 approaches, as dates in the years 2000, 2001, etc., will be indistinguishable from 1900 and 1901, bringing chaos to flight schedules, billing cycles, and more. Computers only have 48K Random Access Memory (RAM) and therefore do not have the capacity to store larger amounts of data. This has already led to several complications from national behemoth companies down to the everyday

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<sup>1</sup>(Kratofil and Burbank 1999, 39)

retail consumer. Amway Corporation, a chemicals and soap company, mistakenly rejected chemicals that they thought were 100 years old because they couldn't track the dates with the necessary specificity<sup>2</sup>. Umun Life Insurance Company lost 700+ broker licensing status records for the same reason<sup>3</sup>. Credit card processing machines crash if a card expiring in "00" is used<sup>4</sup>.

There is much that the world has yet to understand before Y2K can actually be solved. Most politicians and computer scientists differ on many paths to solutions. For example, the cost of the Y2K solution: The Gartner Group, made up of new Y2K consultants, estimates that it will take up to \$600 billion worldwide to fix these bugs; the White House Office of Management and



COMPUTER PROGRAMMERS have been busy correcting Y2K problems. In this software "factory" in Charlotte, N.C., more than 250 technical staff of contractor Alydaar Software fix millions of lines of code each month. Much of this work is for Fortune 500 companies.

Budget only expects it to cost \$5.4 billion (though individual US agencies estimated amounts that sum to a much higher number); General Motors said in a testimony to the US Congress that it would only cost them \$565 million; and the magazine *Information Week* estimates that after including all the litigation, economic disruption costs, and more, the cost of the actual solution could be as high as \$1 trillion.<sup>5</sup> Innovators and technology giants are working around the clock to address Y2K concerns within the private sector, however many of them are getting frustrated with the cost, with the future of the technology and business worlds, and with regulatory guidelines that they anticipate will halt their progress. Governments and international bodies are struggling with

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<sup>2</sup>(de Jager 1999, 88)

<sup>3</sup>(de Jager 1999, 88)

<sup>4</sup>(de Jager 1999, 88)

<sup>5</sup>(Kratofil and Burbank 1999, 39)

domestic threats that diverts their disposable income away from Y2K solutions or forces them to address other political, social, and economic issues.

This Council was set up as a last minute, last-ditch effort to prepare, solve, or deal with the Armageddon that is “Y2K” and it cannot be overstated how important this mission is. Countries around the world have tried to set up their own committees and have failed miserably. The global scientific community can’t figure out how to unite to solve the problem. There are competing papers from several countries trying to pinpoint the central issue of the Y2K problem, leading to mass confusion about which solution to back with their resources. Politicians and corporations are divided on the matter of how important this crisis really is. Motivated by self-interest, some companies, especially giants in the IT and digital infrastructure space, have downplayed the potentially disastrous outcome(s) of Y2K. As a result, consumers and laypeople have no idea of the impending doom.

This Council should be prepared to deal with a wide array of issues as they work to solve a crisis with an immovable deadline. There is rampant misinformation spreading in the new age of the “Internet”. International politics and events constantly distract innovators, politicians, and problem-solvers from dealing with this immediate and impending doom. The cost of solving Y2K is projected to be incredibly high and is expected to shift global power dynamics, meaning the people represented by this Council are all driven by different motivations.

## CHARACTER BIOS

### **Sabeer Bhatia: Founder of Hotmail.com**

Known for his relentless pursuit of groundbreaking ideas and unbridled ambition, Bhatia was determined to make a significant impact in the tech world from an early age. His approach to business was marked by his ability to anticipate future trends, his commitment to user-friendly design, and his star-quality charisma that often had investors begging to get in on his action. A graduate of Stanford University, Bhatia's innovation quickly garnered attention, leading to Microsoft's acquisition of Hotmail for hundreds of millions in 1997. Now, with Y2K a major concern for all, the world is looking to Bhatia to see if he can apply his brilliance to address potential threats to digital communication systems and help everyday digital consumers understand what is at stake.

### **Chellis Glendinning: Activist and Neo-Luddite**

Chellis Glendinning is an American author, psychotherapist, and activist known for her advocacy of Neo-Luddism, a movement that critiques modern technology's impact on society and the environment. Glendinning has explored the deep psychological and cultural effects of technological advancement, emphasizing the need for a return to simpler, more sustainable ways of living (i.e., a rejection of modernity and a return to monke). She views the Y2K crisis as a manifestation of the inherent risks and vulnerabilities in our overreliance on complex technologies and is urging the masses to see it as a wake-up call, highlighting the fragility of the modern technological infrastructure and the dangers of placing too much trust in systems that could fail catastrophically. She worries that Y2K is the broader consequences of unchecked technological growth, reinforcing her belief in the importance of balancing technological advancements with ecological and cultural wisdom.

## **Bill Gates: Chief Executive Officer of Microsoft**

As the head of one of the world's leading technology companies, Gates is at the forefront of the Y2K crisis. People enjoy his confidence, pragmatism, proactive leadership, divisiveness, and collaborative spirit. Gates, aware of the potential impact of the Y2K bug on global IT infrastructure, felt he had to take steps to address the problem. Gates is compelled to channel both his personal and public assets into this problem because he understands that if the Y2K bug becomes a big enough issue, his entire tech empire will collapse. Thus, he focuses on making sure there is a healthy amount of money in the funding landscape for Y2K solutions and is a strong believer in the fact that the problem would not be solved without private and public collaboration.

## **Dr. Grace Mary Hopper: Mathematician & Computer Science Pioneer**

Dr. Grace Mary Hopper is a pioneering mathematician and computer scientist whose groundbreaking work laid the foundation for modern computing. Known for her development of the first compiler and contributions to COBOL, one of the earliest high-level programming languages, Hopper's innovations significantly advanced and continue to advance the field of computing. Y2K has forced Dr. Hopper out of retirement and her concerns around rigorous data management and software practices seem to be growing. She is loved by many in the computer science industry for her meticulous approach to problem solving, for her effective communication among stakeholders, and for her ability to always think outside of the box. Her background in the Navy as a rear admiral certainly contributed to her tough and no-nonsense attitude, as well as her championship for diversity and inclusion in male-dominated spaces, which has aided her in blossoming into a trailblazing icon that women will revere for generations to come.

## **Sir Michael Moritz: Global Managing Partner at Sequoia Capital**

Sir Michael Moritz, Global Managing Partner at Sequoia Capital, is a renowned venture capitalist known for his influential role in shaping the technology industry. Under his leadership, Sequoia Capital has backed numerous successful technology startups, demonstrating his keen eye for innovation and technological growth. Moritz views technological advancement as a driving force for societal progress, focusing on investing in transformative ideas and companies that can redefine industries. However, Y2K has really



become a nuisance that he is not excited to deal with. Startups – the primary way a venture capitalist like him makes his money – have been derailed in the tech world because they aren't sophisticated enough to adapt to the Y2K bug. Mortiz has been growing increasingly nervous that his latest string of investments — companies that he has pledged to help steer through this crisis — will lose him money and his reputation. He is also becoming increasingly focused on spotting the next innovative company that may have the solution to all our problems.

### **Peter Verniero: Attorney General of New Jersey, USA**

Verniero, known for his expertise in law and public policy, views technological growth as crucial for economic development and efficiency. He views it as essential to ensure that technological systems are adequately taken care of to prevent disruptions that could undermine public confidence in both technology and governmental oversight. He is a big believer in the fact that while technology and development is needed, it is vital that there is robust legal oversight so that potential risks are mitigated, compliance is strong, and that, above all, consumers are protected. This specific goal originates from Verniero feeling a strong legal responsibility and duty due to his job, his deep sense of ethics and morality, and his frustration over consumers being exploited by tech giants. With such a motivation, Verniero has been cracking down on tech monopolies and has been focusing more of his attention on ensuring market fairness across the board.

### **Michael Dammann Eisner: Chief Executive Officer of Disney**

Michael Dammann Eisner is known for his dynamic leadership style and charismatic personality. As CEO of Disney, he is both visionary and hands-on, with a knack for blending creativity with strategic thinking. Eisner's approach is characterized by his passion for entertainment and his ability to inspire those around him, particularly in his often-overlooked performance as Tinkerbell when available actresses fell ill. He is also known for his resilience and determination, navigating Disney through both triumphs and challenges with a focus on maintaining the company's legacy of innovation, excellence, and an admirably single-minded dedication to mouse-themed branding. As Y2K becomes a growing concern, Eisner knows that it will be a

significant thorn in all of his company's operations, from film and television productions, theme parks, investments, and other business ventures. Eisner sees Y2K as both a technical challenge and a critical test of Disney's commitment to excellence and customer satisfaction. Any hiccup in Disney's operations could impact not just the company's bottom line but also the cherished experiences of millions of visitors and viewers. His focus is on preserving the seamless, high-quality experiences that Disney is known for, reflecting his dedication to both operational excellence and customer care. Eisner is hoping to safeguard Disney's magical reputation, even in the face of potential technological hurdles.

### **Norio Ohga: Chairman of Sony**

As Chairman of Sony, Norio Ohga is deeply immersed in managing the Y2K crisis with the millennium approaching. Renowned for his visionary leadership and profound grasp of technology and entertainment, Ohga is overseeing Sony's efforts to ensure that its global operations and diverse product lines are Y2K compliant. He faces substantial challenges, including coordinating updates across an extensive network of international subsidiaries and navigating varying regulatory environments in different countries. Ohga's focus is on addressing potential disruptions in Sony's electronics, entertainment systems, and business operations worldwide. This involves rigorous testing and proactive updates to prevent any issues that could impact consumers across different regions. He also contends with the complexities of synchronizing Y2K compliance across a multinational organization, dealing with differing standards and practices in various countries. Known for his charismatic and decisive approach and unbeatable pong skills, Ohga combines strategic insight with hands-on management. His personality reflects resilience and adaptability, driven by a commitment to maintaining Sony's reputation for innovation and reliability despite the international challenges posed by the millennium transition.

## **Boris Yeltsen: Prime Minister of Russia**

As Prime Minister of Russia, Boris Yeltsin is at the forefront of addressing the Y2K crisis as the millennium approaches. Renowned for his commitment to reform, Yeltsin is focused on ensuring that Russia's critical infrastructure and government systems are prepared for the potential impacts of the Y2K bug. He faces significant challenges, including modernizing outdated technology and managing the complexities of Y2K compliance across a vast and diverse country. He is especially struggling with balancing his foreign policy when the whole world is racing towards a Y2K solution. As the Prime Minister of Russia, Yeltsen needs to make sure that Russia's finance, transportation, and public services stay functioning and updated to handle the Y2K bug. Coordinating efforts across different regions and industries is a major task, compounded by the need to address varying levels of technological readiness and regulatory compliance throughout the country. Without those efforts, Russia could accidentally start a nuclear war, or something far worse...though that may serve other goals that Yeltsen has. Known for his resilience and determination, Yeltsin combines a pragmatic approach with a strong focus on national stability and progress. His leadership is characterized by a commitment to overcoming obstacles and ensuring that Russia navigates the millennium transition with minimal disruption, reflecting his broader goals of modernizing the country and advancing its global standing.

## **Peter de Jager: Computer Programmer/Consultant**

Peter de Jager, a prominent computer programmer and consultant, is widely recognized for his early identification of the Y2K problem, which he declared a serious issue as early as 1993. His foresight in predicting the millennium date change issue garnered him significant attention and acclaim within the tech community and beyond. De Jager's ability to spot the Y2K problem stemmed from his deep understanding of software systems and date handling following his education at University of Toronto in Canada. Following the publication of his paper in 1993, de Jager discovered a newfound passion for educating others about the Y2K crisis and advocating for proactive solutions. He uses his platform to raise awareness about the technical and organizational challenges posed by Y2K, emphasizing the need for comprehensive testing and remediation efforts to prevent potential disruptions. His advocacy emphasizes the importance of taking

action to mitigate risks and ensure that the transition to the year 2000 occurs smoothly, reflecting his commitment to addressing technological challenges with foresight and expertise.

### **Kang Bong-kyum: Minister of Finance of Republic of Korea**

As Minister of Finance of the Republic of Korea, Kang Bong-kyum is at the forefront of addressing the Y2K crisis and its potential impact on the country's financial systems. With a strong focus on safeguarding the stability of Korea's economy, Kang is leading efforts to ensure that all financial institutions and systems are fully prepared for the millennium date change. One of Kang's significant challenges is addressing the complexity of integrating updates across a diverse financial sector, which includes both advanced and legacy systems. Additionally, he must navigate the pressures of maintaining public confidence in the financial system amidst global concerns about Y2K. Kang's current focus is on developing rigorous testing and modeling systems to make sure the financial systems of his country do not crash when the date flips from 1999 to 2000, all while fighting to secure tickets to an H.O.T. concert. He is managing the unique challenges of coordinating with banks, investment firms, and other financial entities to ensure that their technology and processes are Y2K compliant. This includes overseeing the testing of software systems and implementing contingency plans to address any potential issues. Kang's leadership reflects a commitment to mitigating risks and ensuring that Korea's financial infrastructure remains robust and reliable as the millennium approaches. His efforts are aimed at preventing any adverse effects on the economy and reinforcing the resilience of Korea's financial systems in the face of this global challenge.

### **Philip Condit: Chief Executive Officer of Boeing**

Condit is focused on addressing the potential impacts of the millennium date change on Boeing's operations and the broader airline industry. It is vital for Condit's company to make sure that all technology systems of the planes and for customers are fully compliant with any regulation or updates that come as a result of this committee. On the regulatory side, Condit is worried that if Boeing does not keep up, it will lose out on

millions, if not billions of dollars worth of government contracts. On the upside, many consumers are nervous about flying because they are afraid that the Y2K bug will cause planes to crash, resulting in essential Boeing equipment washing up on the Jersey shore, leaving Condit with drastically falling ticket sales. The airline industry faces unique challenges with Y2K, given its reliance on complex IT systems for scheduling, maintenance, and air traffic control. Boeing's approach involves close collaboration with airlines and those pesky regulatory bodies to mitigate risks and prevent potential disruptions. Condit's leadership is focused on safeguarding the industry's operations and maintaining public confidence in air travel. Condit must work to achieve extensive testing and remediation efforts for the company's aircraft systems, engineering software, and operational tools. Condit's role is critical in maintaining the world-renowned safety and reliability of Boeing's aircraft, which are integral to global air travel.

### **General Sir Charles Guthrie: Chief of the Defence Staff of Great Britain**

General Sir Charles Guthrie is a pivotal figure in managing the UK's military response to the Y2K crisis. He is tasked with overseeing the readiness and resilience of the British Armed Forces against potential disruptions from the millennium date change. His leadership is crucial in ensuring that military operations, communications, and critical systems are Y2K compliant and prepared for any challenges that may arise. Like many others in this committee, General Guthrie needs to develop extensive testing and verification of military systems to mitigate the risk of technological failures that could impact national security. His focus is on safeguarding the operational capabilities of the British Armed Forces, ensuring that all defense systems are robust and resilient to the date change. This includes coordinating with other government departments and international allies to address potential vulnerabilities and develop contingency plans.

### **Jorma Ollila: Chairman of Nokia Corporation**

Under his leadership, Nokia is at the forefront of addressing potential impacts on its telecommunications and technology systems. Ollila's strategic vision is vital in ensuring that Nokia's products and infrastructure are

fully Y2K compliant, minimizing the risk of technological failures that could disrupt global communications and operations. Ollila is trying to be as proactive as possible and has already begun developing testing mechanisms (whose rigorous development involves throwing his phones off of the highest buildings possible and demonstrating their continued use, and carefully monitoring the temperature of a Nokia phone as he advances to higher and higher Tetris levels) and updating Nokia's systems and products. He is trying to ensure that the company's hardware and software are prepared for the millennium date change. He is also making collaboration with industry partners to address potential vulnerabilities and ensure continuity of service top priority.

### **Fujio Cho: President of Toyota Motor Company**

At this moment, Cho's leadership is critical in steering Toyota through the potential challenges posed by the millennium date change, particularly concerning the company's advanced technology systems and global operations. Toyota has an incredibly complex network of manufacturing, supply chain, and administrative systems and Cho must make sure they remain intact as Y2K approaches and is compliant. Cho has also taken it upon himself to act as a connector of the automotive industry, engaging with industry groups and stakeholders to contribute to collective efforts aimed at mitigating potential disruptions in the supply chain and distribution networks.

### **George Yeo: Minister for Trade and Industry of Singapore**

George Yeo is in charge of overseeing the preparedness and resilience of Singapore's economic and industrial sectors in the face of potential disruptions caused by the Y2K bug. He is particularly concerned with Singapore's critical infrastructure, including financial systems, telecommunications, and manufacturing. His leadership is crucial in maintaining confidence in Singapore's economic stability and operational continuity during the transition to the year 2000. In addition to managing domestic preparedness, Yeo engages in international cooperation to address potential cross-border impacts of Y2K. He collaborates with global trade



partners and international organizations to share information and develop strategies to minimize disruptions in global supply chains and trade networks.

### **Pramod Mahajan: Minister of Information Technology of India**

Under Mahajan's guidance, the Indian government coordinates with industry leaders and technical experts to address potential vulnerabilities and enhance the overall preparedness of the nation. This includes initiating public awareness campaigns and providing support to businesses and organizations in updating their systems to handle the millennium date change effectively. He is also in charge of initiating and developing global alliances to solve Y2K and has a keen interest in advancing India's position in the world through the Y2K crisis. Mahajan sees India as having a strong future in the IT and technology space, and wonders if there is a way for India to capitalize on solutions to Y2K. Mahajan's approach involves spearheading national efforts to ensure that critical IT systems and infrastructure are Y2K compliant. Mahajan is primarily in charge of both public and private sector systems, including banking, telecommunications, and government operations.

### **Saikh Altaf: Technical Advisor of the National Y2K Committee of Bangladesh**

Tasked with helping Bangladesh overcome the Y2K bug without disruption to its technological infrastructure or daily life, Altaf is an expert in both the technical aspects of the bug and the political implications of any potential solutions. His goal is to prepare the country's industrial sector, including chemical industry corporations and transit centers, and he works closely with colleagues focusing on the banking, energy, defense, and other important sectors. In a world increasingly reliant on interconnected systems, Altaf's role carries significant global implications. As part of a global network of Y2K experts, Altaf collaborates with international organizations and governments to share knowledge and strategies, recognizing that a coordinated approach is essential to mitigating the risks posed by the Y2K bug. His work is critical not only

for maintaining stability within Bangladesh but also for contributing to the broader effort to ensure that the dawn of the new millennium is met with minimal disruption to global systems.

### **Roger Enrico: Chairman and CEO of PepsiCo**

Enrico has spent most of his professional life managing several well-known brands, including Fritos and Cheetos, before becoming CEO of PepsiCo's beverage division in 1983. He was subsequently promoted to vice chair of PepsiCo in 1994, a role he continues to serve in today, and is largely credited with making Pepsi into a national brand that is competitive with Coca-Cola, starting the so-called "Cola Wars" with his innovative marketing strategies. As CEO, he works to diversify the company into more than just a beverage producer and is an expert in navigating industry challenges. Currently, Enrico is deeply engaged with the Y2K issue, recognizing its potential impact on global business operations. He is leading efforts to ensure that PepsiCo and its subsidiaries are well-prepared for the transition into the new millennium, focusing on both technological readiness and strategic planning to mitigate any risks associated with the Y2K bug, while remaining as transparent with the general public as a crisp bottle of Crystal Pepsi.

### **Michael Gelband: Global Head of Fixed Income Trading at Lehman Brothers**

As the Global Head of Fixed Income Trading, Michael Gelband is responsible for ensuring that Lehman Brothers remains profitable by managing risk and staying ahead of technological advancements. The Y2K bug, along with the rapid rise of the Digital Age, is a critical concern for Gelband. The potential for widespread technological disruption poses significant risks to the financial markets, and Gelband is focused on ensuring that Lehman Brothers' trading systems are fully Y2K-compliant to maintain market stability and client confidence. Gelband believes that the Digital Age is not just a challenge but an opportunity. By embracing new technologies, he aims to enhance trading efficiency and secure a competitive edge for Lehman Brothers in a rapidly evolving financial landscape.

## Sean Parker: Founder of Napster

Sean Parker, a digital guerrilla and coding aficionado, believes that the Digital Age is an opportunity to foster new global connections and make previously proprietary information available to the general public at little to no cost. As the founder of Napster and a pioneer of several early social networking platforms, Parker plays a pivotal role in the ongoing digital revolution. Napster, the groundbreaking peer-to-peer file-sharing service he co-created, is actively disrupting the music industry by allowing users to share MP3 files freely, igniting widespread debates about copyright, intellectual property, and the future of digital media. Parker's influence places him at the center of the conversation surrounding the Y2K era. His vision of a more connected, open world is helping to shape the early contours of the internet, laying the groundwork for newly emerging social media platforms.

## Van Toffler: President of MTV Networks Music Group

Van Toffler's focus as the President of MTV Networks Music Group is the development of new programs that will engage today's youth, such as MTV's *The Real World* and the cultural masterpiece, *Napoleon Dynamite*. His time as an executive in the entertainment industry has taught him how to create engaging content for any audience, and he wants to stay on top of the rapid changes associated with the digital revolution. Entertainment has always been a quickly evolving field, but the increased accessibility of content emphasizes this aspect of Toffler's industry. Toffler believes that his expertise can help in preparing the general public for the Y2K bug, and his position in media has inspired him to view technological development not just as a global issue, but one that should be driven by the people themselves over larger governments and corporations, and his influence can help to direct that development.

## **Brian Barron: Foreign Correspondent for the BBC**

Brian Barron, a foreign correspondent for the BBC, is renowned for his in-depth reporting and courageous coverage from some of the world's most volatile regions. With a career spanning several decades, Barron has become a trusted voice in international journalism, bringing global audiences closer to the realities of conflict, political upheaval, and social change. His reports have provided crucial insights into the complexities of global events, and places him in the center of some of the most significant stories of our time, from the fall of the Berlin Wall to the Gulf War. As the world approaches the year 2000, he can offer a truly global perspective of the potential geopolitical and economic impacts of the Y2K bug, and believes the global response to be a part of a broader conversation about global preparedness and the interconnectedness of modern systems. His commitment to uncovering the truth, even in the face of danger, has earned him a reputation as one of the BBC's most respected journalists. As the world continues to change rapidly, Barron remains dedicated to his mission of informing the public, helping to shape our understanding of international affairs.

## **Sheikh Mohammed bin Rashid Al Maktoum: Crown Prince of Dubai, and Vice President and Prime Minister of the UAE**

Sheikh Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Vice President and Prime Minister of the UAE, is a visionary leader known for his ambitious plans to transform Dubai into a global center of commerce, tourism, and innovation. His leadership is driving the rapid development of Dubai, turning it into one of the world's most promising and modern cities. Under his guidance, Dubai has launched numerous infrastructure projects and initiatives aimed at enhancing its global presence and attracting international investment. His focus on modernizing the UAE's infrastructure and embracing emerging technologies aligns with global discussions on the potential impacts of Y2K, highlighting his role in ensuring that the nation is prepared for the challenges and opportunities of the new millennium. His dedication to advancing the UAE's

development is matched by his commitment to the welfare and prosperity of its people (but first and foremost, his own), making him a pivotal figure in the region's ongoing transformation.

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