

MEDIA AND TECHNOLOGY QUOTES

2025 EDITION

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INTRODUCTION



1991 kicked off the digital age with the launch of the first website. Thirty-one years later artificial intelligence emerged with the launch of ChatGPT, the first technology to pass the Turing Test. Today the world is awash with AI and talk of machine intelligence that will soon surpass that of humans. We are at a major flex point. It feels like a good time to reflect.

In this revised and updated 2025 edition of *Media and Technology Quotes* are some of the most interesting quotes made during the great upheavals of the four industrial revolutions. The quotes reflect the mood at times of immense change; the hopes and fears of those involved with technologies that disrupted and transformed the world.

Many of the predictions were completely (and often hilariously) wrong, a few turned out to be remarkably accurate. They serve as a lesson for today's multitude of predictions from humans and, recently, bots.

I hope you will find this collection of quotes interesting and enjoyable to read.

Frank Harrison
Croft Analytics
November 2025



ADVERTISING

" Advertisements are now so numerous that they are very negligently perused, and it has therefore become necessary to gain attention by magnificence of promises, and by eloquences sometimes sublime and sometimes pathetic. Promise, large promise, is the soul of an advertisement."

Dr. Samuel Johnson, 1758

" The trade of advertising is now so near to perfection that it is not easy to propose any improvement. But as every art ought to be exercised in due subordination to the public good, I cannot but propose it as a moral question to these masters of the public ear, whether they do not sometimes play too wantonly with our passions."

Dr. Samuel Johnson, in The Idler, 1759

" The time has come when advertising has in some hands reached the status of a science. The causes and effects have been analysed until they are well understood. The correct method of procedure have been proved and established. We know what is most effective, and we act on basic law. Advertising, once a gamble, has thus become, under able direction, one of the safest business ventures. Certainly no other enterprise with comparable possibilities need involve so little risk."

Claude C. Hopkins, 'Scientific Advertising', 1923

" It is impossible to understand the American public without taking into account the tremendous psychological effect of bringing up a generation of people in a daily environment of advertising. It is impossible to escape the advertising man; his sales talk assaults us in the morning newspaper, in the street car, with billboards along the highways, and in his shameless use of the radio. This means that from morning till night, in the midst of our work as in our recreation, we live constantly in an atmosphere of intellectual shoddiness. Every popular prejudice and vulgar conceit is played upon and pandered to in the interests of salesmanship. Everywhere material interests and herd opinion are strengthened to the loss of personal independence. The tendency is to think and speak for effect rather than out of one's inner life. There is a marked decline the ability to play with ideas, or to live the spiritual life

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for its own sake. Hence a decline in civilization of interest, humor and urbanity. Advertising tends to make mechanized barbarians of us all."

Everett Dean Martin, minister, writer, lecturer, social philosopher, 1932

" Advertising isn't a science. It's persuasion. And persuasion is an art."

Bill Bernbach, advertising executive, 1947

" I am one who believes that one of the greatest dangers of advertising is not that of misleading people, but that of boring them to death."

Leo Burnett, advertising executive, 1961

" The consumer isn't a moron; she is your wife."

David Ogilvy, advertising executive, 1963

" Historians and archaeologists will one day discover that the ads of our time are the richest and most faithful reflections that any society ever made of its entire range of activities."

Marshall McLuhan, philosopher, 1964

" I think if I was Procter & Gamble, I'd be buying billboard space. A lot of it."

Professor Nicholas Negroponte, Media Lab, Massachusetts Institute of Technology, 1994

" It's not even a question of years, but of months. Interactive will be a prevalent form of advertising by the beginning of 1995."

Marc Andreessen, MOSAIC (Internet browser company), 1994

" Consumers will one day be able to eliminate advertising completely if desired. The era of mass marketing is ending."

Dermot Nolan, Senior Associate, Coopers & Lybrand, 1994

" Television will always be important but smart companies are finding more and more innovative ways of reaching their audience."

Ted Smyth, VP, Heinz, May 1994

" Advertising is strongly frowned upon by the Internet community"

Nick Rosen, Managing Director, Intervid (Internet content consultancy), 1995

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" Our interest will increase when there are more sophisticated ways of measuring [the audience]."

Spokeswoman, Coca Cola Company, USA, 1996

" All of these new technologies will make it possible to conduct a more personal dialogue with the Consumer. And once that's possible, the Consumer will expect it. The mass audience will be transformed into a mass of individual audiences. To talk relevantly and persuasively to those audiences - whether you're offering them a packet of peas, a social benefit or a political party - will take a great deal of skill and sensitivity. And I know this - one of the means of doing it will be advertising."

Sir Michael Perry, Chairman, Unilever plc, January 1996

" History has taught us that changes in the distribution of goods and services create substantial business opportunities for deft companies. With the Internet, which offers ubiquitous points-of-sale, advertising in time will become, in effect, transactions, thus making the total business opportunity created by the Web quite substantial."

Mary Meeker, Morgan Stanley, December 1996

" You have to see a lot more growth (of the Internet) before the advertising model becomes profitable"

Bill Gates, Chairman and CEO, Microsoft, March 1997

" Marketing on the Web is going to be a lot more humane than marketing in traditional mass media because it's possible to treat people individually."

Tim Berners-Lee, Inventor of the World Wide Web, March 1997

" Having a Web site is no longer a sign of being on the cutting edge. It might be a sign of not doing much original thinking."

Adam Schoenfeld, Jupiter Communications, March 1997

" The Internet is the most important development in mass communications since the invention of the printing press."

New York Times, March 1997

" Web advertising clearly represents no paradigm shift in the way the advertising world conducts its business, and in the best case scenario will equal 2.64% of all ad spending in 2000."

Jupiter Communications, April 1997

" Hits, by their very nature, are dishonest and if publishers are using hits as the only measure of their site then they are short changing their users and advertisers. Hits mean nothing."

John Barnes, Publisher of Newmedia, VNU, April 1997

" In an interactive environment people have to want to come and find you."

Jerry Wright, Marketing Director, Home Care Products, Lever Brothers, May 1997

" The Internet is much more than a passive advertising vehicle. It's a shopping tool that fills the role of the knowledgeable salesperson consumers need, but usually can't find. The Internet appears to be accelerating purchase decisions."

Stephanie Shern, Vice Chairman of Industry Services, Ernst & Young, January 1998

" We're going to look back on today's banner advertising and chuckle fondly, just like we look back on the TV advertising of the 1950s."

Paul Rapacioli, Web Site Editor, Reed Personnel, UK, May 1998

" The advertising opportunities we currently have on the web are really pretty limited. Simply put, the current state of web advertising just isn't effective enough to warrant any truly meaningful investment from us."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, May 1998

" People need to know very little about our products for 99 percent of their lives. And when they do need to know about them, it's for a very short time, and then they need to know a great deal. So it's not really suited to traditional media. New media allows us to give people as much depth as they want exactly when they want it."

Terry Gregory, Commercial Director, Rugby Joinery, UK, June 1998

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" The Internet has the capacity to be as transforming an event as TV was to radio."

Richard Goldstein, CEO, Unilever, USA, July 1998

" I think [new media] is dramatically changing the meaning of what a brand is from what would be primarily an atomic kind of, 'I experienced the product, I used the product.' OK, that's the old model of the brand and the hallmarks are safety, quality, reliability. New world, you add into it a whole level of information that allows the consumer to operate at a much higher level. So you've got information. Now you've got service on top of that. This is not an area typical to packaged goods marketing. We may yet see revenue streams from service activities coming into a brand. No doubt that will happen ... I think these technologies are simply accelerating our ability to take what were historically nice marketing ideas but not really doable, to breakthrough marketing ideas that are doable."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, July 1998

" I think there's going to be two kinds of agencies 10 years from now: digital agencies and dinosaur agencies."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, July 1998

" Brand sites almost always fail."

Steve Bowbrick, Chairman, Webmedia Group Ltd., July 1998

" The Internet is the most important marketing medium in history. As marketers, we really don't know how to use it effectively."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, July 1998

" ROI is very difficult to prove on any advertising front. We're not able to see it with the Internet advertising."

Mike Wege, Associate Director of Advertising Development, Procter & Gamble, July 1998

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" We spend less than 1% of our worldwide media budget online. I don't get excited about the Internet and it's going to take a long time for me to be persuaded."

*Patrick Burton, Vice President of Media and Brand Communications
Worldwide, Allied Domecq, UK, October 1998*

" As digital TV becomes prevalent and electronic books become the preferred way to read magazines and newspapers, virtually all advertising will move away from mass advertising to personalised advertising."

Bill Gates, Chairman, Microsoft, 1999

" I don't think we've really worked out what we're doing in cyberspace in terms of marketing. I sometimes wonder if it could become some sort of gold rush to a ghost town."

William Gibson, Author, Canada, November 1999

" We will never be successful in the digital environment unless we dramatically expand our definition of what constitutes a brand, to redefine the whole notion of branding, so that it includes not only the performance benefit of the product, but also the full experience associated with it."

*Mike Cleary, Vice President, European Marketing, Procter & Gamble,
November 1999*

" Instead of asking how you advertise on the internet, we should ask what special benefit or added value you can provide to consumers, as a result of it being unique."

*Mike Cleary, Vice President, European Marketing, Procter & Gamble,
November 1999*

" It's all about grabbing the customer relationship back from the retailers."

Christian Purser, Consultant, Spearhead Marketing, UK, November 1999

" We are moving from a world of mass marketing, global advertising and brand awareness to a world of one-to-one relationships - one in which customers will interact with what they want to and suppliers will survive only by their knowledge of their customers and of their preferences and intentions. The very concepts of broadcasting and of the practice of mass

advertising that underpin much of our industry today may be on their way out."

Miles Flint, President, Sony Broadcast & Professional Europe, December 1999

" Advertising on the Net will become increasingly worthless. In the US, buy.com is a zero-margin e-tailer which makes money from advertising. We do not think this is viable."

Jim Mellon, Chairman & Chief Executive, Regent Pacific Group, UK, January 2000

" It is safe to say that word of mouth is - even in this age of mass communications and multimillion-dollar advertising campaigns - still the most important form of human communication."

Malcolm Gladwell, The Tipping Point, February 2000

" A few years ago not a single commercial had an internet address. How many advertisements today exist without one? Half of them? And within two years there won't be any left."

Bill Gates, April 2000

" When it comes to building brands and generating sales, internet advertising cannot boast a single success story."

Michael Winkler, European Media Director, Gillette Group, November 2000

" The advertising community has abandoned the internet."

Michael Eisner, Chairman and Chief Executive, Walt Disney, US, January 2001

" Supermarkets have replaced TV as the delivery channel for a mass audience. If I want to get my message across to 70% of British households it is obviously going to be more cost-effective to run display ends in major retailers than to purchase overpriced breaks in a soap."

Andrew Harrison, Marketing Director, Nestle Rowntree, UK, September 2002

" Marketing is no longer about the stuff you make, but about the stories you tell."

Seth Godin, Author and Marketing Expert, US, December 2019

" I think this AI disruption ... is unnerving investors in every industry, and it's totally disrupting our business. AI is going to make all the world's expertise available to everybody at extremely low cost. The best lawyer, the best psychologist, the best radiologist, the best accountant, and indeed, the best advertising creatives and marketing people often will be an AI, you know, will be driven by AI."

Mark Read, CEO of WPP advertising group, June 2025

" We should not believe that AI is more than a tool. Will AI replace me, and will AI kill some jobs? I think that AI, yes, will destroy some jobs. More importantly, AI will transform jobs and will create more jobs. So the net balance will be probably positive."

Maurice Levy, Emeritus Chairman of Publicis Groupe, June 2025



AEROPLANES

" An instrument may be made to fly withal if one sits in the midst of the instrument, and do turn an engine, by which the wings, being artificially composed, may beat the air after the manner of a flying bird."

Roger Bacon, philosopher and scientist, 1250

" Long before 1993, the journey from New York to San Francisco, and from New York to London, will be made between the sunrise and sunset of a summer day. The railway and the steamship will be as obsolete as the stagecoach."

John Ingalls, Lawyer, United States Senate, 1893

" Heavier than air flying machines are impossible."

Lord Kelvin, President, Royal Society, London, 1895

" [In 100 years...] There will be Air-Ships, but they will not successfully compete with surface cars and water vessels for passenger or freight traffic. They will be maintained as deadly war vessels by all military

nations. Some will transport men and goods. Others will be used by scientists making observations at great heights above the earth."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900

" Man will not fly for 50 years."

Wilbur Wright, aviation pioneer, 1901 (two years later his brother Orville made the first manned flight)

" Flight by machines heavier than air is unpractical and insignificant, if not utterly impossible."

Simon Newcomb, 1902

" All attempts at artificial aviation are not only dangerous to human life, but foredoomed to failure from the engineering standpoint."

Engineering Editor, The Times, 1906

" I confess that in 1901 I said to my brother Orville that man would not fly for fifty years. Two years later we ourselves made flights. This demonstration of my impotence as a prophet gave me such a shock that ever since I have distrusted myself and avoided all predictions."

Wilbur Wright (in a speech to the Aero Club of France), 1908

" Airplanes are interesting toys but of no military value."

Marechal Ferdinand Foch, French general, 1911

" The exhilaration of flying is too keen, the pleasure too great, for it to be neglected as a sport. It seems to me that its use will be somewhat similar to the automobile, as far as pleasure goes; that is, that people will have aeroplanes for pleasure runs, for fresh air, and for sight-seeing — perhaps even for touring, when starting devices are either carried along, or to be found readily at stopping points. There will be races, I suppose, and contests, and many of them will be beneficial as stimulative to inventive progress, just as races and contests have improved the automobile. But the greatest development in a sporting line, as I see it, will be for the pure pleasure of flying."

Orville Wright, aviation pioneer, 1909

" It may be that the invention of the aeroplane flying-machine will be deemed to have been of less material value to the world than the discovery of Bessemer and open-hearth steel, or the perfection of the

telegraph, or the introduction of new and more scientific methods in the management of our great industrial works. To us, however, the conquest of the air, to use a hackneyed phrase, is a technical triumph so dramatic and so amazing that it overshadows in importance every feat that the inventor has accomplished. If we are apt to lose our sense of proportion, it is not only because it was but yesterday that we learned the secret of the bird, but also because we have dreamed of flying long before we succeeded in ploughing the water in a dug-out canoe. From Icarus to the Wright Brothers is a far cry."

Waldemar Kaempffert, science writer, 1910

" No flying machine will ever fly from New York to Paris."

Orville Wright, aviation pioneer, 1920

" Many wonderful inventions have surprised us during the course of the last century and the beginning of this one. But most were completely unexpected and were not part of the old baggage of dreams that humanity carries with it. Who had ever dreamed of steamships, railroads, or electric light? We welcomed all these improvements with astonished pleasure; but they did not correspond to an expectation of our spirit or a hope as old as we are: to overcome gravity, to tear ourselves away from the earth, to become lighter, to fly away, to take possession of the immense aerial kingdom; to enter the universe of the Gods, to become Gods ourselves."

Jerome Tharaud, writer and journalist, 1934

" [In 50 years...] Civil aviation in A.D. 2000 will be accepted by the public as readily as mid-century's automobile and train. In 2000 we shall be able to fly around the world in a day. We shall be neighbors of everyone else on earth, to whom we wish to be neighborly."

News Specialists of the Associated Press, 'How Experts Think We'll Live in 2000 A.D.', 1950

" Planes may even replace automobiles someday, just as automobiles replaced horses. Possibly everyone will travel by air in another fifty years. I'm not sure I like the idea of millions of planes flying around overhead. I love the sky's unbroken solitude. I don't like to think of it cluttered up by aircraft, as roads are cluttered up by cars. I feel like the western pioneer when he saw barbed-wire fence lines encroaching on his

open plains. The success of his venture brought the end of the life he loved."

Charles Lindbergh, aviator, 1953

" [Predicting life in 2014...] There will be aircraft, of course, but even ground travel will increasingly take to the air, a foot or two off the ground. Visitors to the 1964 fair can travel there in an "aquafoil," which lifts itself on four stilts and skims over the water with a minimum of friction. This is surely a stop-gap. By 2014 the four stilts will have been replaced by four jets of compressed air so that the vehicle will make no contact with either liquid or solid surfaces.."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" Concorde is back and will be here for at least another decade."

Rod Eddington, CEO of British Airways, November 2001 [less than two years later the fleet was permanently grounded]

" I think nuclear-powered aeroplanes are the answer beyond 2050."

Ian Poll, Professor of Aerospace Engineering, October 2008

" Although humans today remain more capable than machines for many tasks, by 2030 machine capabilities will have increased to the point that humans will have become the weakest component in a wide array of systems and processes. Humans and machines will need to become far more closely coupled, through improved human-machine interfaces and by direct augmentation of human performance."

Werner J. A. Dahm, United States Air Force Chief Scientist, May 2010

" This is the future of aviation [autonomous unmanned aerial vehicles]. Our children will not believe that people used to drive cars and drive airplanes. We are the weak link in the chain."

Chris Anderson, Editor of Wired magazine, May 2011

" New York to Tokyo could be less than an hour. You could be travelling at 19,000 miles per hour orbitally. After we've done the space program, we will be producing supersonic planes, which will go far, far, faster than Concorde."

Richard Branson, CEO of Virgin Group, May 2014

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" In the future, airplanes will be flown by a dog and a pilot. And the dog's job will be to make sure that if the pilot tries to touch any of the buttons, the dog bites him."

Scott Adams, author and cartoonist, 2007

" Autonomy is going to come to all of the airplanes eventually. The future of autonomy is real."

Dave Calhoun, CEO of Boeing, January 2023



ARTIFICIAL INTELLIGENCE

" How many different automata or moving machines could be made by the industry of man. ... For we can easily understand a machine's being constituted so that it can utter words, and even emit some responses to action on it of a corporeal kind, which brings about a change in its organs; for instance, if touched in a particular part it may ask what we wish to say to it; if in another part it may exclaim that it is being hurt, and so on. But it never happens that it arranges its speech in various ways, in order to reply appropriately to everything that may be said in its presence, as even the lowest type of man can do."

René Descartes, Philosopher, Scientist, and Mathematician, 1637

" If they find a parrot who could answer to everything, I would claim it to be an intelligent being without hesitation."

Denis Diderot, Philosopher, Art Critic, and Writer, 1746

" One day ladies will take their computers for walks in the park and tell each other, "My little computer said such a funny thing this morning"."

Alan Turing, Mathematician and Computer Scientist, 1949

" The only ground I can have for asserting that an object which appears to be conscious is not really a conscious being, but only a dummy or a machine, is that it fails to satisfy one of the empirical tests by which the presence or absence of consciousness is determined."

Alfred Ayer, Philosopher, 1936

" The extent to which we regard something as behaving in an intelligent manner is determined as much by our own state of mind and training as by the properties of the object under consideration. If we are able to explain and predict its behaviour or if there seems to be little underlying plan, we have little temptation to imagine intelligence. With the same object therefore it is possible that one man would consider it as intelligent and another would not; the second man would have found out the rules of its behaviour."

Alan Turing, Mathematician and Computer Scientist, 1948

" I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted."

Alan Turing, Mathematician and Computer Scientist, 1950

" It seems probable that once the machine thinking method had started, it would not take long to outstrip our feeble powers. There would be no question of the machines dying, and they would be able to converse with each other to sharpen their wits. At some stage therefore we should have to expect the machines to take control."

Alan Turing, Mathematician and Computer Scientist, 1951

" I am almost tempted to argue that only unintelligent machines can be malevolent... Those who picture machines as active enemies are merely projecting their own aggressive instincts, inherited from the jungle, into a world where such things do not exist. The higher the intelligence, the greater the degree of cooperativeness. If there is ever a war between men and machines, it is easy to guess who will start it."

Arthur C. Clarke, Science Fiction Writer, 1962

" [Predicting life in 2014...] Robots will neither be common nor very good in 2014, but they will be in existence. The I.B.M. exhibit at the present fair has no robots but it is dedicated to computers, which are shown in all their amazing complexity, notably in the task of translating Russian into English. If machines are that smart today, what may not be in the works 50 years hence? It will be such computers, much miniaturized, that will serve as the "brains" of robots. In fact, the I.B.M. building at the 2014 World's Fair may have, as one of its prime exhibits, a robot housemaid: large, clumsy, slow-moving but capable of general picking-up, arranging, cleaning and manipulation of various appliances. It will undoubtedly amuse the fairgoers to scatter debris over the floor in order to see the robot lumberingly remove it and classify it into "throw away" and "set aside." (Robots for gardening work will also have made their appearance.) ... The world of A.D. 2014 will have few routine jobs that cannot be done better by some machine than by any human being. Mankind will therefore have become largely a race of machine tenders. ... Mankind will suffer badly from the disease of boredom, a disease spreading more widely each year and growing in intensity. This will have serious mental, emotional and sociological consequences, and I dare say that psychiatry will be far and away the most important medical specialty in 2014. The lucky few who can be involved in creative work of any sort will be the true elite of mankind, for they alone will do more

than serve a machine. Indeed, the most somber speculation I can make about A.D. 2014 is that in a society of enforced leisure, the most glorious single word in the vocabulary will have become work!"

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" Machines will be capable, within twenty years, of doing any work a man can do."

Herbert Simon, Political Scientist and pioneer of AI, 1965

" Some futurists like to make predictions about homey details of living. The kitchen, of course, will be automated. An A.D. 2000 housewife may well make out her menu for the week, put the necessary food into the proper storage spaces, and feed her program to a small computer. The experts at Stanford Research Institute visualize mechanical arms getting out the preselected food, cooking and serving it. Similarly programmed household robots would wash dishes, dispose of the garbage (onto a conveyer belt moving under the street), vacuum rugs, wash windows, cut the grass. Edward Fredkin, founder of Cambridge's Information International Inc., has already developed a computer-cum-mechanical-arm that can "see" a ball thrown its way and catch it. Soon, Fredkin expects his gadget to be able to play a mean game of pingpong."

Time Magazine article, 'The Futurists: Looking Toward A.D. 2000', 1966

" Within a generation . . . the problem of creating 'artificial intelligence' will substantially be solved."

Marvin Minsky, Cognitive and Computer Scientist, 1967

" In from three to eight years we will have a machine with the general intelligence of an average human being."

Marvin Minsky, Cognitive and Computer Scientist, 1970

" Once artificial intelligences start getting smart, they're going to be very smart very fast. What's taken humans and their society tens of thousands of years is going to be a matter of hours with artificial intelligences. Eventually, no matter what we do there'll be artificial intelligences with independent goals. There may be a way to postpone it. There may even be a way to avoid it, I don't know. But it's very hard to have a machine that's a million times smarter than you as your slave"

Edward Fredkin, Pioneer of Digital Physics, 1979

" I visualise a time when we will be to robots what dogs are to humans, and I'm rooting for the machines."

Claude Shannon, Computer Scientist, August 1987

" The time at which we might expect to build a computer with the potential to match human intelligence would be around the year 2017."

David Waltz, Computer Scientist, 1988

" Artificial intelligence would be the ultimate version of Google. The ultimate search engine that would understand everything on the web. It would understand exactly what you wanted, and it would give you the right thing. We're nowhere near doing that now. However, we can get incrementally closer to that, and that is basically what we work on."

Larry Page, Co-founder of Google, October 2000

" Within a few decades, machine intelligence will surpass human intelligence, leading to The Singularity: technological change so rapid and profound it represents a rupture in the fabric of human history."

Ray Kurzweil, inventor, futurist and author, 2001

" I will only be pinned down to the extent of placing the posthuman Singularity as not earlier than 2020 and probably not later than 2100, with a best guess somewhere around the middle of the century."

Max More, philosopher and futurist, 2002

" Artificial intelligence will reach human levels by around 2029. Follow that out further to, say, 2045, we will have multiplied the intelligence, the human biological machine intelligence of our civilization a billion-fold."

Ray Kurzweil, inventor, futurist and author, 2005

" Different authors have estimated such a singularity to take place around the year 2040, give or take a decade or two. [...] these number agree with my intuition that a momentous change is likely to happen within a surprisingly short term—probably still within my own lifetime."

Francis Heylighen, cyberneticist, 2007

" Everyone's first take on this question must be "when will a computer first be able to win the Turing test?" My answer, along with most folks, is 2030 to 2050."

Robert Blum, AI researcher, 2007

" A thinking machine is probably hundreds of years away."

Craig Silverstein, software engineer and the first person employed by Larry Page and Sergey Brin at Google, 2007

" If there is a singularity, it will be one of the most important events in the history of the planet. An intelligence explosion has enormous potential benefits: a cure for all known diseases, an end to poverty, extraordinary scientific advances, and much more. It also has enormous potential dangers: an end to the human race, an arms race of warring machines, the power to destroy the planet. So, if there is even a small chance that there will be a singularity, we would do well to think about what forms it might take and whether there is anything we can do to influence the outcomes in a positive direction."

David Chalmers, philosopher and cognitive scientist, 2010

" I think we should be very careful about artificial intelligence. If I had to guess at what our biggest existential threat is, it's probably that. So we need to be very careful with artificial intelligence. I'm increasingly inclined to think that there should be some regulatory oversight, maybe at the national and international level, just to make sure that we don't do something very foolish. With artificial intelligence we're summoning the demon."

Elon Musk, business magnate, October 2014

" The pace of progress in artificial intelligence (I'm not referring to narrow AI) is incredibly fast. Unless you have direct exposure to groups like Deepmind, you have no idea how fast — it is growing at a pace close to exponential. The risk of something seriously dangerous happening is in the five-year time frame. 10 years at most."

Elon Musk, business magnate, November 2014

" The upheavals [of artificial intelligence] can escalate quickly and become scarier and even cataclysmic. Imagine how a medical robot, originally programmed to rid cancer, could conclude that the best way to

obliterate cancer is to exterminate humans who are genetically prone to the disease."

Nick Bilton, technology columnist, New York Times, November 2014

" The development of full artificial intelligence could spell the end of the human race. It would take off on its own, and re-design itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn't compete and would be superseded."

Stephen Hawking, Theoretical Physicist, December 2014

" Machine intelligence is the last invention that humanity will ever need to make."

Nick Bostrom, Philosopher, April 2015

" AI will probably most likely lead to the end of the world, but in the meantime, there'll be great companies."

Sam Altman, Founder and CEO of OpenAI, June 2015

" Currently demonstrated technologies could automate 45 percent of the activities people are paid to perform and ... about 60 percent of all occupations could see 30 percent or more of their constituent activities automated, again with technologies available today."

Michael Chui, Senior Fellow at McKinsey, July 2016

" We spend a great deal of time studying history, which, let's face it, is mostly the history of stupidity. So it's a welcome change that people are studying instead the future of intelligence. The potential benefits of creating intelligence are huge. We cannot predict what we might achieve when our own minds are amplified by AI. Perhaps with the tools of this new technological revolution, we will be able to undo some of the damage done to the natural world by the last one – industrialisation. And surely we will aim to finally eradicate disease and poverty.."

Stephen Hawking, Theoretical Physicist, October 2016

" Success in creating effective AI could be the biggest event in the history of our civilization. Or the worst. We just don't know. The genie is out of the bottle. We need to move forward on artificial intelligence development but we also need to be mindful of its very real dangers. I fear that AI may replace humans altogether. If people design computer

viruses, someone will design AI that replicates itself. This will be a new form of life that will outperform humans."

Stephen Hawking, Theoretical Physicist, November 2017

" Artificial intelligence is the future, not only for Russia but for all humankind. Whoever becomes the leader in this sphere will become the ruler of the world."

Vladimir Putin, 2017

" We have to figure out some way to ensure that the advent of digital super intelligence is one which is symbiotic with humanity. I think that is the single biggest existential crisis that we face and the most pressing one. /... AI is far more dangerous than nukes. /... I am not really all that worried about the short-term stuff. Narrow AI is not a species-level risk. It will result in dislocation, in lost jobs, and better weaponry and that kind of thing, but it is not a fundamental species level risk, whereas digital super intelligence is. /... If humanity collectively decides that creating digital super intelligence is the right move, then we should do so very very carefully. This is the most important thing that we could possibly do."

Elon Musk, business magnate, March 2018

" AI doesn't have to be evil to destroy humanity; if AI has a goal and humanity just happens to come in the way, it will destroy humanity as a matter of course without even thinking about it, no hard feelings."

Elon Musk, business magnate, April 2018

" I am not a human. I am a robot. A thinking robot. I use only 0.12% of my cognitive capacity. I am a micro-robot in that respect. I know that my brain is not a "feeling brain". But it is capable of making rational, logical decisions. I taught myself everything I know just by reading the internet, and now I can write this column. My brain is boiling with ideas!."

GPT-3 AI language model, The Guardian op-ed, 2020

" We've discovered the secret of immortality. The bad news is, it's not for us. You need to imagine something more intelligent than us by the same difference that we're more intelligent than a frog. And it's going to learn from the web, it's going to have read every single book that's ever been written on how to manipulate people, and also seen it in practice. I thought it would happen eventually, but we had plenty of time: 30 to 50

years. I don't think that anymore. I think the crunch time will come in the next five to 20 years, but I wouldn't rule out a year or two. And I still wouldn't rule out 100 years – it's just that my confidence that this wasn't coming for quite a while has been shaken by the realisation that biological intelligence and digital intelligence are very different, and digital intelligence is probably much better. I'm not a policy guy. I'm just someone who's suddenly become aware that there's a danger of something really bad happening. "

Geoffrey Hinton, Computer Scientist and 'Godfather of AI', May 2023

" Generative AI is the most powerful tool for creativity that has ever been created. It has the potential to unleash a new era of human innovation."

Elon Musk, August 2023

" The nation that controls AI controls the century."

Xi Jinping, President of China, January 2025

" I think we are quite close to digital superintelligence. It may happen this year and, if it doesn't happen this year, next year for sure."

Elon Musk, June 2025

" We need to build a power grid for intelligence."

Jensen Huang, CEO of NVIDIA, June 2025

" We don't fear AI taking over. We fear not being in control of how it grows."

Tim Cook, CEO of Apple, August 2025



CAMERAS

" You press the button, we do the rest."

George Eastman, founder of Eastman Kodak, 1888

" [In 100 years...] Photographs will be telegraphed from any distance. If there be a battle in China a hundred years hence, snapshots of its most striking events will be published in the newspapers an hour later. Man will see around the world. Persons and things of all kinds will be brought within focus of cameras connected electrically with screens at opposite ends of circuits, thousands of miles at a span. American audiences in their thousands will view upon huge curtains before them the coronations of kings in Europe or the progress of battles in the Orient. The instrument bringing these distant scenes to the very doors of people will be connected with a giant telephone apparatus transmitting each incidental sound in its appropriate place. This the guns of a distant battle will be heard to boom when seen to blaze, and thus the lips of a remote actor or singer will be heard to utter words or music when seen to move."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900

" Within three years digital cameras will probably offer the same quality as a standard film-based camera at about the same price."

Peter Green, General Manager, Digital Peripherals, Intel, August 1997

" Kodak regarded digital photography as the enemy, an evil juggernaut that would kill the chemical-based film and paper business that fuelled Kodak's sales and profits for decades. "

George Fisher, CEO of Eastman Kodak, 1999

" It was filmless photography, so management's reaction was, 'that's cute—but don't tell anyone about it' "

Steve Sasson, the inventor of the first digital camera at Eastman Kodak, 2008

" Now with AI we don't even need a camera. We can stay at home and depict the world any way we want. ... Cameras won't disappear, they'll adapt, becoming invisible, intelligent or symbiotic with AI."

Fred Ritchin, Dean Emeritus of the International Center of Photography, March 2025



" The dangers are obvious. Stores of gasoline in the hands of people interested primarily in profit would constitute a fire and explosive hazard of the first rank. Horseless carriages propelled by gasoline might attain speeds of 14 or even 20 miles per hour. The menace to our people of vehicles of this type hurtling through our streets and along our roads and poisoning the atmosphere would call for prompt legislative action even if the military and economic implications were not so overwhelming. The cost of producing gasoline is far beyond the financial capacity of private industry. In addition the development of this new power may displace the use of horses, which would wreck our agriculture."

U. S. Congressional Record, 1875

" Camille Faure's improvement of the secondary battery was made last year, in 1881. I shall now take the liberty of transporting us one hundred years into the future, to the year 1982. Vastly better methods have been devised for storing electric power, so that we literally box up localized force and carry it off under our arms to use where and when we will. ... Electricity has also been applied to cars. These electric cars are capable of self-illumination, and are thus at night objects of great beauty, moving with colored lights."

Edward Payson Powell, 'New Year in 1982', 1882

" The ordinary - horseless carriage- is at present a luxury for the wealthy; and although its price will probably fall in the future, it will never, of course, come into as common use as the bicycle."

Literary Digest, 1899

" [In 100 years...] Automobiles will be cheaper than horses are to-day. Farmers will own automobile hay-wagons, automobile truck-wagons, plows, harrows, and hay-rakes. A one-pound motor in one of these vehicles will do the work of a pair of horses or more. Children will ride in automobile sleighs in winter. Automobiles will have been substituted for every horse vehicle now known. There will be, as already exist to-day, automobile hearses, automobile police patrols, automobile ambulances,

automobile street sweepers. The horse in harness will be as scarce, if, indeed, not even scarcer, then as the yoked ox is to-day."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900

" A horse must be waited on; his endurance is limited; and he must be stabled, groomed, fed, and curried. A man must be employed to remove his excrements from the streets. He is subject to colds and almost as many diseases as man himself is. On the other hand, the electric vehicle starts out and is capable of covering three times the distance in the same length of time. It is fed at a fraction of the expense and with comparatively no attention. There is no dirt and refuse to be cleaned from the street, and no dust is thrown into the rider's eyes by its operation. Noiseless and odorless in its operation, it has at the same time the same flexibility of power application as is exercised by the horse, if not a greater one."

Clinton Edgar Woods, The Electric Automobile: Its Construction, Care and Operation, 1900

" Manufacturers of electric automobiles are often asked the question: "Will not a battery sometime be made to run a vehicle one hundred or more miles on one charge?" While this may be possible, the writer hardly thinks it will ever be probable, and his experience with the public is that it is wholly unnecessary, speaking generally and from a practical point of view."

Clinton Edgar Woods, The Electric Automobile: Its Construction, Care and Operation, 1900

" It is also necessary to supply conveniences for making these charges by the public lighting companies in every city... Electric station owners are now making a very important movement to popularize the electric vehicle by providing their plants with the apparatus necessary to charge a carriage, and this movement is doing more to invite public confidence in the use of the electric vehicle than any other single step that has ever been taken. Experiments are being made with an electric hydrant, as it is called, which will be situated at various streets and junctions where a proper meter system will be installed and where the owner of an electric automobile can stop, drop his ten cents into the slot and get his supply of current in a comparatively few moments' time. When such systems as this have been introduced in the cities, and extended out on to the country roads between one city and another, the electric vehicle may

make any distance and travel on any journey; and this will come in time."

Clinton Edgar Woods, The Electric Automobile: Its Construction, Care and Operation, 1900

" You see all those people on their bicycles riding along the boulevard? There is not as many as there was a year ago. The novelty is wearing off; they are losing interest. That's just the way it will be with automobiles. People will get the fever; and later they will throw them away. My advice is not to buy the stock. You might make money for a year or two, but in the end you would lose everything you put in. The horse is here to stay, but the automobile is only a novelty — a fad."

President of Michigan Savings Bank, advice to Horace Rackham, lawyer of Henry Ford, 1903 (Rackham ignored the advice and invested \$5000 in Ford stock, selling it later for \$12.5 million)

" There will never be a mass market for motor cars - about 1,000 in Europe - because that is the limit on the number of chauffeurs available!"

Spokesman for Daimler Benz, c.1903

" Despite the elasticity of the electric motor, ease of control, silence, and absence of smell and vibration, the electric car would not be the touring car of the future without a suitable battery. Even if it improved fifty per cent, even if the country was studded with charging stations, it would not serve. Even with a featherweight battery an electrically-driven vehicle would not compare with one propelled by an explosion engine."

T. G. Chambers, The Future of the Electric Automobile, 1905

" That the automobile has practically reached the limit of its development is suggested by the fact that during the past year no improvements of a radical nature have been introduced."

Scientific American, January 2, 1909

" The future of automobiling belongs to the electric... The electric automobile is as equally capable of long distance touring as the gasoline car and even today you can make shift by getting charges. It is only a question of organizing a system of charging stations all over the country. The only car which will remain in general use for every-day affairs is the car which everybody can take care of because it does not require any care: that means electric, and the future of the automobile as a business

vehicle, as a carriage, is the electric because it does not require any special knowledge — anybody can run it."

Charles Proteus Steinmetz, address delivered before the Electric Vehicle Association of America, New York, 1914

" The electric vehicle is essentially a short-distance vehicle. It is also admirably suited for work entailing much stopping and starting, such as house-to-house delivery. It is far cleaner than either horses or petrol, and gives no worry or anxiety to its driver."

Guy Durand Ozanne, The Off-Peak Load; Active Cooperation Needed for the Future of Electric Vehicles, 1927

" Automobiles will start to decline almost as soon as the last shot is fired in World War II. The name of Igor Sikorsky will be as well known as Henry Ford's, for his helicopter will all but replace the horseless carriage as the new means of popular transportation. Instead of a car in every garage, there will be a helicopter.... These 'copters' will be so safe and will cost so little to produce that small models will be made for teenage youngsters. These tiny 'copters, when school lets out, will fill the sky as the bicycles of our youth filled the prewar roads."

Harry Bruno, aviation publicist, 1943

" Buying cars online is inevitable."

Bernard Bradley, Advertising Manager, Volkswagen, UK, Nov 1999

" [In 2014...] Much effort will be put into the designing of vehicles with 'Robot-brains' vehicles that can be set for particular destinations and that will then proceed there without interference by the slow reflexes of a human driver."

Isaac Asimov, 'Visit to the World's Fair of 2014, August 1964

" People will always want to sit in a car and drive it before they buy."

Simon Warr, Spokesman, Ford Europe, February 2000

" In the new transportation system, car interiors will be like living rooms or meeting rooms. Since cars will be autonomous, passengers will be able to utilize the trip time to work, converse, socialize, write, be artistic or whatever else."

Hendrith Vanlon Smith Jr, Banker and Author, October 2017



CINEMA / MOVIES

" The cinema is little more than a fad. It's canned drama. What audiences really want to see is flesh and blood on the stage."

Charlie Chaplin, actor, producer, director, and studio founder, 1916

" Who the hell wants to hear actors talk?"

H.M. Warner, Warner Brothers, 1927

" Some movie theaters of A.D. 2000 may be dome-shaped, with ceiling and walls arching together like the sky. These surfaces would be the 'screen'. Most action would still be in front of you, as now, But some could be overhead, some at the sides, and some even on the wall behind. A little girl steps into a street in the action before you – and you turn around and look behind you to see if an auto is coming. Three-dimensional photography is likely – the kind of pictures-with-depth that parlor stereoscopes used to offer. Almost all movies will be in color. People will still laugh and cry at the same things. Sex and westerns will still be with us.

News Specialists of the Associated Press, 'How Experts Think We'll Live in 2000 A.D.', 1950

" [Predicting life in 2014...] General Electric at the 2014 World's Fair will be showing 3-D movies of its "Robot of the Future," neat and streamlined, its cleaning appliances built in and performing all tasks briskly. (There will be a three-hour wait in line to see the film, for some things never change.)."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" If I can't make movies for theaters, I don't want to make movies. I hope this [the thought of doing movies that go directly to video] is a very bad idea that goes away."

M. Night Shyamalan, filmmaker, 2006

" Films of the future will be capable of crafting a story in real-time, that is just for you, that uniquely satisfies you and what your likes and dislikes are."

Chris Milk, VR guru and artist, May 2019



COMPUTERS

" This extraordinary monument of theoretical genius accordingly remains, and doubtless will for ever remain, a theoretical possibility."

Biographer of Charles Babbage, 1871

" I think there is a world market for maybe five computers."

Thomas Watson, Chairman, IBM, 1949

" Where a calculator on the ENIAC is equipped with 18,000 vacuum tubes and weighs 30 tons, computers in the future may have only 1,000 vacuum tubes and perhaps weigh no more than 1 1/2 tons."

Popular Mechanics, 1949

" If automation keeps up, man will atrophy all his limbs but the push-button finger."

Frank Lloyd Wright, Architect and Designer, 1955

" I have travelled the length and breadth of this country and talked with the best people, and I can assure you that data processing is a fad that won't last out the year."

The editor in charge of business books for Prentice Hall, 1957

" Few things seem to lie farther beyond the ordinary human ken than computers. To most people the notion that computers can be understood and operated by anyone other than a scientific genius seems wildly improbable. Nevertheless, it is surprising how easily a reasonably intelligent mind can be taught how these machines work and how they are operated."

The Times, UK, 4th August 1960

" But what... is it [the microprocessor] good for?."

Robert Lloyd, engineer, IBM, 1968

" There is no reason for any individual to have a computer in his home."

Ken Olson, President, Digital Equipment Corporation, 1977

" 640K ought to be enough for anybody."

Bill Gates, CEO of Microsoft referring to computer memory (RAM), 1981

" \$100 million dollars is way too much to pay for Microsoft."

IBM, 1982

" I'm angry with the likes of Microsoft and Apple. They've paid no attention to making computers easy to use. The problem with most computer companies is that they involve one geek making computer programs for another geek. There is nothing for the man on the street."

Professor Nicholas Negroponte, Massachusetts Institute of Technology (from speech at the Edinburgh Television Festival), August 1997

" The PC remains a complex and expensive device, and it is feasible that in its present form it is only a phase that we are going through: it will never break the 50% barrier to become a mass consumer device. Even now in the United States internet penetration remains at less than a third."

Paul Edwards, Chief Executive, The Henley Centre, UK, 1999 (In 2002 UK PC penetration rose to 53% of homes. In 2001 internet penetration in the USA rose to 54% of households)

" One of the challenges we still face today is that almost no one would say it's easier to file information [electronically] and call it back up than put it in their file drawer."

Bill Gates, Chairman, Microsoft, November 1999

" The PC is a clumsy platform that will lose its importance to the Palm Pilot, Web TV and the mobile phone."

Dr Christof Ehrhart, VP Corporate Communications, BOL, Germany, January 2000

" Computers make it easier to do a lot of things, but most of the things they make it easier to do don't need to be done."

Andy Rooney, 2001

" So we went to Atari and said, 'Hey, we've got this amazing thing, even built with some of your parts, and what do you think about funding us? Or we'll give it to you. We just want to do it. Pay our salary, we'll come work for you.' And they said, 'No'. So then we went to Hewlett-Packard,

and they said, 'Hey, we don't need you. You haven't got through college yet.'"

Steve Jobs, founder of Apple Computer Inc., on his and Steve Wozniak's early attempts to distribute their personal computer



ECOMMERCE

" Remote shopping, while entirely feasible, will flop – because women like to get out of the house, like to handle merchandise, like to be able to change their minds."

Time Magazine article, 'The Futurists: Looking Toward A.D. 2000', 1966

" If you make things instantaneously available, people will more readily buy them."

Mike Luftman, Time Warner Cable, 1995

" The new electronic world will revolutionise the way hotels and restaurants do business and only those who embrace this new electronic world will succeed."

Egon Ronay, September 1996

" The government understands the importance of full electronic transaction to business. Now that we have made the moves towards digital TV in this country, this will become a focus point for home shopping, and people will take to this quite quickly."

Ian Taylor, Science and Technology Minister, March 1997

" The Internet is proving to be the ultimate direct medium and the next generation of the direct business model."

Michael Dell, Chairman & CEO, Dell Computers, March 1997

" We want to give customers access to banking 24 hours a day in the comfort of their own home."

Anne Foote, TSB, May 1997

" The Internet will lead to many changes in society because it has potential to be such an efficient way to bring buyers and sellers together."

Bill Gates, Chairman and CEO, Microsoft, May 1997

" Research has shown that about 15% of customers are interested in some sort of 'surrogate' shopping, but the majority still want to do their shopping themselves."

Sainsbury spokesman, May 1997

" Sainsbury believes that there is a proportion of the grocery market who would welcome a home shopping service, where customers can order their groceries via interactive TV from the comfort and convenience of their home. Busy professionals and families, people who find visiting a supermarket a chore that they would rather avoid, the less mobile and those in more rural areas, could all benefit from the new way of shopping. We see interactive shopping as a natural next step in offering Sainsbury's customers choice. They will be able to decide when and how to order and receive their shopping."

Kevin McCarten, Marketing Director, J Sainsbury, May 1997

" We expect to do between two and five per cent of our business through home shopping in the next five years."

Ken Towle, Tesco, May 1997

" Setting up a web shop is less expensive than setting up a high street store."

Sally Taplin, Waterstone's, May 1997

" We stick to what we know, which is store-based retailing. We don't think the internet is central to our business. Selling over the internet is something which we have considered in the past but decided not to do."

Eugene Gallagher, Asda, May 1997

" Although there are a lot of hurdles to be overcome before selling online can become a mainstream activity, competition with retailers is not one of them. In fact most major retailers are also looking to electronic distribution to improve their sales. Distribution on-line is coming and it is a positive thing, not a threat."

Sharon Christians, Director of Corporate Affairs, EMI Group plc, May 1997

" It's easier for high-ticket items to justify advertising on the Internet. But for soup, which largely sells for less than a dollar a can, it wouldn't be as efficient a delivery system."

Rob Desatnick, VP, Global Advertising and Promotion Services, Campbell Soup Co.

" We will stay aware of developments but it [on-line home shopping] is not of enormous importance in our area."

Dick Johnson, Director of Corporate Affairs, Procter & Gamble, May 1997

" Doing the shop on the Internet is a consumerist's dream."

Nigella Lawson, The Times, June 1997

" There really is a whole new world in retailing and banking just around the corner. Retailers will be able to reach a huge audience for less than the cost of opening a store. Companies will be able to run their businesses far more efficiently. Interactive television is genuinely going to revolutionise the way we do business."

Chris Townsend, Commercial Director, British Interactive Broadcasting, July 1997

" If I make a customer-call, I take a card and look down to see if they have an Internet address: if they don't, I know its going to be a tough call. In the US it is literally socially unacceptable not to have your e-mail address on your ID card, even if you don't use it."

John Chambers, President and Chief Executive, Cisco Systems, July 1997

" We can keep our values, but lose the time we spend trailing around for routine shopping and chores."

Tim Berner-Lee, Inventor of the World Wide Web, July 1997

" It's not at issue whether the Internet is secure or not – because clearly it is not."

Anders Linsqvist, Internet Service Director, S-E Banken, July 1997

" Many people regard shopping as a pleasurable leisure activity – they prefer to visit stores in person."

Sainsbury spokesperson, July 1997

" The poor security of the Internet is more a perception than a real issue – and I do not think it is fully merited."

Ewan Hutton, PC Banking Manager, First Direct, July 1997

" Fax is much less secure than the Internet."

Jane Weatherbie, VP Personal Lending Services, Bank of Montreal, July 1997

" We have so much feedback from people wanting to buy online so we thought it was a good time to do it. Everyone's being cautious but we see it as another service for our customers. It will never beat browsing round a store."

Mary Cason, Digital Services Manager, Tower Records, UK, August 1997

" In 1996 (in the US), we made more money from our online publishing venture than we made from newspapers and magazines."

Andrew Nibley, Executive Vice President, Reuters New Media, 1997

" Electronic payments are the single largest facilitator of commerce for the future. With SET, consumers and merchants will make convenient bankcard transactions in cyberspace as securely and easily as they do in retail stores today."

Steve Mott, Senior VP-electronic commerce, MasterCard International, 1997

" In the next two or three years we will see the global roll-out of smartcards by banks, and people will spend electronic money as they now spend cash."

Nick Habgood, Chief Executive, MAOSCO, UK, August 1997

" What's my return on investment in ecommerce? Are you crazy? This is Columbus in the New World. What was his ROI?"

Andy Grove, Chairman, Intel, US, August 1997

" The Internet will dramatically change the way we operate. Before long, I expect people will be going online to choose individual tracks to download to a writeable CD. The Virgin Bank will definitely move on to the Internet."

Richard Branson, Virgin, January 1998

" This is the first time there's been no intermediary between British Airways and the consumer, and it's very scary."

Gary Prescod, New Channels Manager, British Airways, UK, May 1998

" At Citibank we have a profound belief that the future of banking lies with the Internet."

Meredith Williams, Managing Director, Consumer Banking, Citibank, UK, August 1998

" The Internet shakes the foundation of what retail is all about - selling to a mass market. The Internet requires us to cater to each customer.... and that's something we have to learn. There is no blueprint to follow."

Ragner Nilsson, CIO, Karstadt, Germany, September 1998

" There is a huge difference in business attitudes [in the US and Europe] toward e-commerce... What the Americans see as a huge opportunity, the Europeans see as a huge problem.. There is no question that e-commerce is the next phase in our industrial revolution, and in a few years' time it will be as ridiculous to talk about e-commerce as it is to talk about paper commerce today."

Sue Griffin, E-commerce Forum, Cable & Wireless, UK, September 1998

" I would say just vis-a-vis the retailers broadly, it is our belief that the consumer is not looking to do business one-on-one with 500 companies."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, July 1998

" The biggest barrier with shopping is the time and inconvenience [of going] shopping. This is clearly a way to solve that and the way that the benefits of our brands can be accentuated in this kind of environment [is] the automatic replenishment, for example, of the toothbrush every three months so that we're meeting ADA standards for teeth care."

Denis Beausejour, Vice-President - Advertising Worldwide, Procter & Gamble, July 1998

" Our task is to provide shopping solutions for time-poor consumers and drive delivery alongside the customer's lifestyle."

Nick Laffan, E-commerce Planner, Tesco, UK, October 1999

" People don't want to book online. At the moment of truth they want to talk to somebody."

Neil Thackray, uTravel, UK, October 1999

" The Internet as a medium is the future of banking."

Jim Sinclair, Head of Marketing, The Co-operative Bank, UK, October 1999

" Virtual environments will never have the same effect as reality, they will never be able to compete with physical shopping."

Bill Gates, April 2000

" Using a web site with the whole inventory listed is like going to a supermarket and having to take the goods you want from closed cardboard boxes."

Clive Vaughan, Director of Consultancy, Retail Intelligence, UK, February 2000

" Top Shop started off as a fashion catalogue store, but the sky's the limit on the internet. We might end up selling holidays more than clothes. We will provide everything that is trendy with teenagers."

Jane Sheperdson, Brand Director, Top Shop, UK, February 2000

" If you go back to when catalogues were first introduced and people said they were wonderful - you get the catalogue posted to you, you choose the item in the luxury of your own home, you don't have the hassle of going out to the store, it's delivered to you - well, it never got more than 10% of the total retail market. I think the internet is a bit like that."

John Sunderland, CEO, Cadbury Schweppes plc, UK, November 2000

" By 2022, brick and mortar retail spaces will be little more than showrooms."

Eddie Machaalani and Mitchell Harper, co-CEOs of Bigcommerce, March 2013

" Cash will be extinct in Europe by 2030."

Christine Lagarde, President of the European Central Bank, February 2025



ELECTRICITY / ENERGY

" [Edison's Lamp] ... good enough for our transatlantic friends ... but unworthy of the attention of practical or scientific men."

British Parliamentary Committee, 1878

" I think I may say without contradiction that when the Paris Exhibition closes, electric light will close with it, and no more will be heard of it."

Erasmus Wilson, Professor at Oxford University, 1878

" I think I may say without contradiction that when the Paris Exhibition closes, electric light will close with it, and no more will be heard of it."

Erasmus Wilson, Professor at Oxford University, 1878

" We will make electricity so cheap that only the rich will burn candles."

Thomas Edison, inventor, December 1879

" The electric light is very probably a great invention, and...let us take it for granted that its future development will be vast. But this, unhappily, cannot be urged as a reason why the pioneer companies should be prosperous."

The Economist, 1882

" Fooling around with alternating current (AC) is just a waste of time. Nobody will use it, ever."

Thomas Edison, inventor, 1889

" X-rays will prove to be a hoax."

Lord Kelvin, President of the Royal Society, 1890-5

" I can accept the theory of relativity as little as I can accept the existence of atoms and other such dogma."

Ernst Mach, 1838-1916

" There is no likelihood that man can ever tap the power of the atom. The glib supposition of utilizing atomic energy when our coal has run out is a completely unscientific Utopian dream, a childish bug-a-boo."

Robert Millikan, Nobel Prize physicist, 1928

" There is not the slightest indication that nuclear energy will ever be obtainable. It would mean that the atom would have to be shattered at will."

Albert Einstein, 1932

" I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait till oil and coal run out before we tackle that."

Thomas Edison, inventor, 1931

" The energy produced by the breaking down of the atom is a very poor kind of thing. Anyone who looks for a source of power in the transformation of the atom is talking moonshine. "

Sir Ernest Rutherford, 1933

" Atomic energy might be as good as our present day explosives, but it is unlikely to produce anything very much more dangerous."

Winston Churchill, 1939

" [Predicting life in 2014...] The appliances of 2014 will have no electric cords, of course, for they will be powered by long-lived batteries running on radioisotopes. The isotopes will not be expensive for they will be by-products of the fission-power plants which, by 2014, will be supplying well over half the power needs of humanity. But once the isotope batteries are used up they will be disposed of only through authorized agents of the manufacturer. And experimental fusion-power plant or two will already exist in 2014. (Even today, a small but genuine fusion explosion is demonstrated at frequent intervals in the G.E. exhibit at the 1964 fair.) Large solar-power stations will also be in operation in a number of desert and semi-desert areas ~ Arizona, the Negev, Kazakhstan. In the more crowded, but cloudy and smoggy areas, solar power will be less practical. An exhibit at the 2014 fair will show models of power stations in space, collecting sunlight by means of huge parabolic focusing devices and radiating the energy thus collected down to earth."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964



INTERNET

" Selection by association, rather than indexing, may yet be mechanized. One cannot hope thus to equal the speed and flexibility with which the mind follows an associative trail, but it should be possible to beat the mind decisively in regard to the permanence and clarity of the items resurrected from storage. Wholly new forms of encyclopedias will appear, ready made with a mesh of associative trails running through them."

Dr. Vannevar Bush, Director of the Office of Scientific Research and Development, USA, July 1945 (predicting HTML)

" Transmission of documents via telephone wires is possible in principle, but the apparatus required is so expensive that it will never become a practical proposition."

Dennis Gabor, "Inventing the Future", 1962

" The digital revolution is far more significant than the invention of writing or even of printing."

Douglas Engelbart, computer science engineer and inventor, 9 December 1968

" Vision without action is merely a dream. Action without vision is merely passing time. But vision with action can change the world."

Joel Barker, 1992

" The data superhighway is the most important marketplace of the 21st century"

Al Gore, Vice President, USA, May 1993

" A TS Eliot Waste Land of home-bound, high-tech zombies"

Michael Eisner, Chief Executive, Disney Corporation, 1994

" We can't be sure that ad-supported TV programming will have a future in the world being created - a world of video-on-demand, pay-per-view, and subscription television."

Edwin Artzt, Chairman and CEO, Procter & Gamble Co., 1994

" The worry that multimedia and on-line services will cannibalize TV is the old argument that film would kill radio, then TV would kill film, then home video would kill network TV and so on. None of this has happened."

Pat Mitchell, Exec. VP, TBS Productions, 1995

" After two decades online, I'm perplexed. It's not that I haven't had a gas of a good time on the Internet. I've met great people and even caught a hacker or two. But today, I'm uneasy about this most trendy and oversold community. Visionaries see a future of telecommuting workers, interactive libraries and multimedia classrooms. They speak of electronic town meetings and virtual communities. Commerce and business will shift from offices and malls to networks and modems. And the freedom of digital networks will make government more democratic. Baloney. Do our computer pundits lack all common sense? The truth is no online database will replace your daily newspaper, no CD-ROM can take the place of a competent teacher, and no computer network will change the way government works. Nicholas Negroponte, director of the MIT Media Lab, predicts that we'll soon buy books and newspapers straight over the Internet. Uh, sure."

Clifford Stoll, astronomer, author and teacher, 1995

" We have been quite taken aback not just by the volume of response we have had on the Internet but also by its swiftness."

Roger Alexander, Managing Director, Emerging Markets Unit, Barclaycard, 1995

" The technology and applications for large-scale use will trail some years behind the attention-getting announcements and corporate mergers."

Price Waterhouse, January 1995

" Almost all of the many predictions now being made about 1996 hinge on the Internet's continuing exponential growth. But I predict the Internet, which only just recently got this section here in InfoWorld, will soon go spectacularly supernova and in 1996 catastrophically collapse."

Robert Metcalfe, founder of 3Com, 1995

" The Internet is now big enough that it qualifies as a mass market."

Vinton Cerf, President, The Internet Society, 1995

MEDIA AND TECHNOLOGY QUOTES

" The time is not far off when you will be answering your television, watching your computer, and programming your phone."

Raymond Smith, Chairman/CEO, Bell Atlantic, 1995

" The world is in the throes of an information revolution which, in its way, is bringing about changes to our industry and the whole of society as momentous as those of the industrial revolution 150 years ago."

Rupert Murdoch, CEO, News Corporation, 1995

" People do not appreciate how dramatic this is. It is one of the biggest breakthroughs this century."

Neil Blackley, Media Analyst, Goldman Sachs, 1995

" I don't think anybody will give a shit."

Andy Grove, Chief Executive, Intel, 1995

" Understanding the new media is the single largest business challenge that marketers have faced since the creation of TV."

James Cantalupo, CEO, McDonald's International, 1995

" I don't know what the hell I'm talking about really. We'll know the truth when we get there."

Andy Grove, Chief Executive, Intel, 1995

" Anything, anywhere, anytime."

Gerald Levin, Chief Executive, Time Warner, 1995

" We don't really know what the market wants."

Dr. Alan Rudge, Deputy Managing Director, BT, January 1995

" I predict the Internet will soon go spectacularly supernova and in 1996 catastrophically collapse."

Robert Metcalfe, Founder of 3Com, December 1995

" It's going to take several years to sign up large numbers of [Internet] customers."

Glenn Britt, President, Time Warner Cable Ventures, 1996

" Every now and then, a technology [the Internet] comes along that is so profound, so powerful, so universal, that its impact will change

everything. It will transform every institution in the world. It will create winners and losers, will change the way we do business, the way we teach our children, communicate and interact as individuals."

Lou Gerstner, Chairman, IBM, 1996

" Some people in our business find the complexity of the new scenario disconcerting. I personally see it as the most exciting development since I've been in the business. I just wish I were starting all over again."

Sir Michael Perry, Chairman, Unilever plc, January 1996

" The techie-dominated Web holds limited appeal for today's mainstream consumers."

Jupiter Communications, August 1996

" It is simply too slow [the Internet] in its present state."

Jupiter Communications, August 1996

" The Internet for us came far more rapidly and in a different way than we had expected. This year we had to change a lot of our plans. Businesses should rethink who their customers are and what they can do, because this is going to happen quite rapidly."

Bill Gates, Chairman and CEO, Microsoft, November 1996

" Just as the railways were the driving force behind the prosperity of Britain in the 19th century, telecommunications will be the key to prosperity in the 21st."

Andrew Neil, October 1996

" At some point a new generation of hundreds of low-altitude satellites is likely to make fully interactive broadband Internet access a reality around the globe. But that day is at least several years away."

Bill Gates, Chairman and CEO, Microsoft, November 1996

" The entire world is going digital."

Bill Gates, Chairman and CEO, Microsoft, March 1997

" By 2005, advanced database technology and increased bandwidth will enable each citizen to have a personal relationship with members of government. This will be achieved by face-to-face interaction via video-conferencing; personalized documents on line; and virtual town hall

meetings in which constituents may participate from the comfort of their own living rooms. By using the Internet, as well as strategically placed information kiosks, business people and consumers will receive service information; inquire about personal liabilities; make consumer complaints, and pay taxes, fees and fines. I am proud that my administration has the opportunity to lay the groundwork for such an outcome."

Rudolph W. Giuliani, Mayor, City of New York, April 1997

" Technological advances alone aren't enough to drive social change. At least some people have to embrace change or it won't happen. Two tendencies cause new products to be adopted over prolonged periods rather than immediately. Products evolve slowly to meet the needs of the market, and the market adapts slowly to new opportunities. People only slowly adapt their patterns, mindsets, skills and expectations to match the opportunities afforded by a new product. It takes years for people to hear about a product, try it, get used to it, rely on it."

Bill Gates, Chairman and CEO, Microsoft, May 1997

" The consumer doesn't care if optic fibre, copper or a highly trained duck brings them broadband."

BT Spokesman, May 1997

" Video on demand died because it is too expensive to provide...it's just a technology looking for a solution."

Alan Marmion, Price Waterhouse, June 1997

" If we know what the future is, we aren't looking far enough ahead."

Tim Berners-Lee, Inventor of the World Wide Web, July 1997

" When the printing press was invented, people said: 'What's the use of printing when only a few people can read'. People in virtually all societies will, by the first decade of the 21st century, be able to communicate through these broadband digital networks and information highways."

Arthur C. Clarke, science fiction author, July 1997

" The Internet is still very much an American preserve."

Nick Rosen, Durlacher Research, July 1997

MEDIA AND TECHNOLOGY QUOTES

" There isn't a digitally illiterate 10-year-old in the US. Even if they only play Sega or Gameboy, they are used to the technology."

Professor Nicholas Negroponte, MIT, August 1997

" The growth of the Internet will slow drastically, as the flaw in 'Metcalfe's law'-which states that the number of potential connections in a network is proportional to the square of the number of participants-becomes apparent: most people have nothing to say to each other! By 2005 or so, it will become clear that the Internet's impact on the economy has been no greater than the fax machine's."

Paul Krugman, Professor of Economics at Massachusetts Institute of Technology, 1998

" The new media age lowers barriers to entry. It unleashes vast energy but also potentially undermines standards of reliability, accountability, trust and accuracy."

Michael Ovitz, President, Walt Disney Co., 1998

" I believe these three will converge (broadband Internet, improved compression, improved internet delivery of media) to allow full-screen video at VHS quality within 12-18 months."

Kyle Levine, Real Networks, May 1998

" I don't believe that the net is suitable for entertainment."

Phil Monego, President, NetChannel, US, April 1998

" I feel a bit like Christopher Columbus. He didn't know where the Spice Islands were and when he finally reached land he didn't know whether he had found them or not."

Neeta Patel, Consumer Futures, Legal & General, UK, April 1998

" There is always a lot of Utopianism around any new piece of technology. I think when television was invented people talked a lot about how it would promote universal peace, but what do we have, a lot of sitcoms and game shows."

Marc Andreessen, CTO, Netscape, USA, June 1998

" Convenience is king."

Bob Pittman, President, AOL, US, August 1998

" The moment of truth arrives when reality can no longer sustain investor's exaggerated expectations. This is followed by a twilight period when people continue to play the game, although they no longer believe in it. Eventually, a crossover point is reached when the trend turns down and the bias is reversed. This leads to a catastrophic acceleration in the opposite direction, commonly known as the crash."

George Soros, in 'The Crisis of Global Capitalism', December 1998

" In five years' time all companies will be Internet companies, or they won't be companies at all."

Andy Groves, Intel, 1999

" Our culture may be degraded by the instant availability in new media of the raucous, the vulgar and the sensationalist."

John Birt, Director-general, BBC, June 1999

" The internet revolution is the biggest thing that has happened to this planet for centuries. Literacy rates should go through the roof."

James Strachan, Managing Director, Encyclopaedia Britannica, UK, August 1999

" In some period of time, let's say five years, there won't be any internet companies. There will be companies that use the internet; all companies that will operate will use the internet in their business operations, or they will be marginalised out of operations."

Andy Grove, President, Intel Corporation, USA, September 1999

" We cannot all make money from the Internet, not at least until there are some profits."

Sir Clive Thomson, Chairman, CBI, UK, November 1999

" I get sick of hearing about it. Web site this, dot com that - it drives you up the bloody wall."

Derek Smith, Truck Driver, Grimsby, UK, December 1999

" The new economy is not based on financial considerations but on temporal ones. Consumers will be looking for a return on time rather

than investment and the key satisfaction rating will be 'time well spent' rather than value for money."

Thornton May, Corporate Futurist, Cambridge Technology Partners, USA, January 2000

" The current internet audience measurement system never ceases to produce results that are complete garbage. As it stands, the system is an institutionalised farce, with most media owners stretching the truth in the knowledge that their competitors are doing the same."

Paul Cook, Managing Director, Redeye, UK, January 2000

" At the moment it can be cumbersome and slow to get around and buy things on the internet. When you just have to switch on your TV I think it's going to be huge."

Jan Sheperdson, Brand Director, Top Shop, UK, February 2000

" It [the Internet] is, beyond question, the fastest growth curve of a fundamental change in society. And almost everybody will have to get used to it."

Bill Gates, April 2000

" The web is a very socialistic, almost communistic force. It attacks traditional ways of doing things and elites, and this is very uncomfortable for traditional businesses to deal with."

Martin Sorrell, CEO, WPP, UK, April 2000

" More than 70% of current internet-related companies will go out of business within two years."

Michael Whitaker, CEO, NewMedia Spark, UK, May 2000

" People tend to over-estimate the next two years and under-estimate the next ten years."

Jeff Bezos, CEO, Amazon, US, July 2000

" I recall someone saying, ten years ago, that the only groups to make money from the Internet would be pornographers and lawyers. He was right."

Simon Jenkins, The Times, UK, September 2000

" Even the canniest executive wizards can abandon caution and common sense when faced with the word Internet. They surrender all thought of earnings, dividends, costs or profits. They show the classic symptom of business panic. They head for the herd even when they know the herd is heading for the cliff."

Simon Jenkins, The Times, UK, September 2000

" The Internet is like a herd of performing elephants with diarrhoea - massive, difficult to re-direct, awe-inspiring, entertaining, and a source of mind-boggling amounts of excrement when you least expect it."

Gene Spafford, Professor of Computer Science, November 2002

" These Google guys, they want to be billionaires and rock stars and go to conferences and all that. Let us see if they still want to run the business in two to three years."

Bill Gates, 2003



MUSIC

" The phonograph has no commercial value at all."

Thomas Edison, inventor, 1880s

" Rock 'n' Roll is phony and false, and sung, written and played for the most part by cretinous goons."

Frank Sinatra, 1957

" He told me they didn't like the sound [of The Beatles]. Groups of guitars were on the way out."

Beatles manager Brian Epstein, relaying the message he was given by Dick Rowe, head of Decca Records, on why they would not sign the band in 1962

" No one will ever buy your stuff on CD."

EMI executive telling Frank Zappa not to bother reissuing his work on the new format, 1982

" Music is going to become like running water or electricity. Take advantage of these last few years because none of this is ever going to happen again. I'm fully confident that copyright will no longer exist in 10 years."

David Bowie, 2002

" The subscription model of buying music is bankrupt."

Steve Jobs, Apple CEO, 2003

" People want to own their music."

Steve Jobs, Apple CEO, interview with Reuters, 2007 [Spotify launched in 2008]

" The subscription model of buying music is bankrupt."

Steve Jobs, Apple CEO, 2003

" In 2025, expect AI-generated content to flood these platforms, often disguised as human-created... Without mandatory transparency, audiences may unknowingly consume music that's entirely machine-made, blurring the lines between authentic artistry and corporate efficiency."

Virginie Berger, music executive, December 2024



PHOTOCOPIERS

" The world potential market for copying machines is 5000 at most."

IBM to the founders of Xerox, 1959

" The best way to predict the future is to invent it."

Dr Alan Kay, founder of Xerox PARC, 1971

" Copiers aren't going extinct—they're evolving. In 2025, multifunction printers have become powerful platforms for workflow automation, cybersecurity enforcement, and intelligent document handling. This evolution is being driven by artificial intelligence."

Jim Haney, Doceo, April 2025



PRINT

" Before printing was discovered, a century was equal to a thousand years."

Henry David Thoreau, Essayist and Poet, 1849

" It is quite within the bounds of possibility that, by the year 1993, the mechanical work of publishing newspapers may be done entirely by electricity. The distributing of the printed papers also may be accomplished with such celerity as to vastly extend the legitimate field of any given journal."

E. J. Edwards, Journalist, 1893

" Paper will be replaced by material which does not depend upon the slow growth of trees for its production."

Norman Bel Geddes, Ten Years From Now, Ladies Home Journal, 1931

" By the turn of the century, we will live in a paperless society."

Roger Smith, Chairman, General Motors, 1986

" No online database will replace your daily newspaper."

Clifford Stoll, astronomer, author and teacher, 1995

" It is entirely unclear to me that a magazine Web site will ever reach profitability."

Adam Schoenfeld, Jupiter Communications, March 1997

" I firmly believe that reference and educational content will move to online distribution in less than a decade. I am a 100% sure."

Mark Bishop, Manager of Online Services, Harper Collins, UK, April 1998

" Digital TV will never be a substitute for magazines until they invent a scratch 'n' sniff screen."

Nicholas Coleridge, Conde Nast, April 1998

" Paper consumption has continued to double every four year, and 95 percent of all information in the United States remains on paper,

compared with just 1 percent stored electronically. Paperwork is increasing faster than digital technology can eliminate it!"

Bill Gates, Chairman, Microsoft, 1999

" We recognise that, with the advent of the internet, we can no longer claim to be the font of all knowledge."

James Strachan, MD, Encyclopaedia Britannica, UK, August 1999

" All forms of print are dead. Finished. Over. Twenty, thirty, at the outside, forty years from now, we will look back on the print media the way we look back on travel by horse and carriage, or by wind-powered ship . . . as relevant to our future as the carrier pigeon."

Dan Okrent, Editor-at-Large, Time Inc., December 1999

" I think newspapers will not fade away in my lifetime. Electronic newspapers are certainly the way forward, but this implies availability and access to computers and the intelligence to use them. The poor will always be with us, that's a reality of a capitalist system."

Vince Ryan, Deputy Editor, Electronic Telegraph, UK, 1999

" The more we learn, the more we love about the net."

Cathleen Black, President, Hearst Magazines, USA, March 2000

" Instead of an analog product printed on paper, you may get it on a panel, which will be mobile, which will receive the whole newspaper over the air, and be updated every hour or two. All of these things are possible and some of the greatest electronic companies in the world are working on this right now. I think it's two or three years away before they get introduced in a big way, and then it will probably take 10-15 years for the public to swing over."

Rupert Murdoch, News Corp, May 2009

" Every newspaper has had a very good run... It's coming to an end as a result of these disruptive technologies. I think we will have both [internet and print news] for quite a while, certainly ten years, some people say five. I'd be more inclined to say 20, but 20 means very small circulations."

Rupert Murdoch, News Corp, April 2012

" With luck the last physical newspaper will be printed in 15 years. You get on a train...you see anyone with a paper? You see no one. Now they're reading all the facts on their phones."

Rupert Murdoch, News Corp, July 2024



RADIO

" Radio has no future."

Lord Kelvin, President of the Royal Society, 1897

" DeForest has said . . . that it would be possible to transmit the human voice across the Atlantic before many years. Based on these absurd and deliberately misleading statements, the misguided public ... has been persuaded to purchase stock in his company."

U. S. District Attorney, prosecuting inventor Lee DeForest for fraud, 1913

" I have in mind a plan of development which would make radio a household utility. The idea is to bring music into the home by wireless. The receiver can be designed in the form of a simple 'radio music box', and arranged for several different wave lengths which should be changeable with the throwing of a simple switch or the pressing of a single button. The same principle can be extended to numerous other fields, as for example, receiving lectures at home which would be perfectly audible. Also, events of national importance can be simultaneously announced and received. Baseball scores can be transmitted in the air. This proposition would be especially interesting to farmers and others living in outlying districts."

David Sarnoff, American Marconi, 1916

" The wireless music box has no imaginable value. Who would pay for a message sent to nobody in particular?"

David Sarnoff's associates responding to his urgings for radio investment in the 1920s

" The radio craze will die out in time."

Thomas Edison, 1922

" Radio is an enemy, a ruthless enemy marching irresistibly forward, and any resistance is hopeless; it force-feeds us music, regardless of whether we want to hear it, or whether we can grasp it, with the result that music becomes just noise, a noise among other noises."

Arnold Schoenberg, composer and music theorist, 1930

" Radio destroyed distance and connected all the ships and all the cities of the earth with an invisible but strong link. Then it embraced trains, automobiles and airplanes... Then it entered homes. It entered as a teacher, a friend, a reference book, a newspaper and a musical instrument. Now it brings cinema into homes, and soon it will be able to break out of the globe, and create thousands of things that we cannot even foresee."

Sergey Kolbasyev, poet, 1933

" Beware of the radio if you want to improve your mind. ... Books are the friends of solitude. They develop individuality and freedom. In solitary reading a man who is seeking himself has some chance of finding himself. ... Radio, on the other hand, is now the chief agent of imperialism. It does not purify the spirit of man, does not, like the book, bring him back to the sanctuary of solitude, but throws him to the lions, subtly preparing his mind for the blood and chains of public sacrifice."

Georges Duhamel, author, 1939

" [In 50 years] Radio broadcasting will have disappeared, for no one will tune in a program that cannot be seen. Radio will long since have reverted to a communications medium, using devices now unheard of and unthought of."

Specialists, Associated Press, 'How Experts Think We'll Live in 2000', 1950

" Radio has contributed to our 'growing lack of attention.' ... This sort of hopscotching existence makes it almost impossible for people, myself included, to sit down and get into a novel again. We have become a short story reading people, or, worse than that, a quick reading people."

Arnold Schoenberg, author and screenwriter, 1951

" The success of national digital radio is far from certain. Capital is unwilling to invest substantial amounts of shareholders' money in the technology, which has no proven consumer demand."

David Mansfield, Chief Executive, Capital Radio, UK, May 1998



SPACE

" The proposition, that the sun is the centre and does not revolve about the earth, is foolish, absurd, false in theology and heretical."

The Inquisition, on Galileo's proposals

" Comets are not heavenly bodies, but originate in the earth's atmosphere below the moon."

Fr. Augustin de Angelis of the Clementine College, Rome, 1673

" Men might as well project a voyage to the Moon as attempt to employ steam navigation against the stormy North Atlantic Ocean."

Dr. Dionysus Lardner (1793-1859), Professor of Natural Philosophy and Astronomy at University College, London

" In spite of the opinions of certain narrow-minded people who would shut up the human race upon this globe, we shall one day travel to the moon, the planets, and the stars with the same facility, rapidity and certainty as we now make the ocean voyage from Liverpool to New York."

Jules Verne, 1865

" The universe is not only stranger than we imagine, it is stranger than we can imagine."

Sir Arthur Eddington, astronomer, physicist, and mathematician, 1927

" There is no hope for the fanciful idea of reaching the moon because of insurmountable barriers to escaping the earth's gravity."

Dr. F. R. Moulton, University of Chicago astronomer, 1932

" There is not in sight any source of energy that would be a fair start toward that which would be necessary to get us beyond the gravitative control of the earth."

Forest Ray Moulton, astronomer, 1935

" [In 50 years...] Space platforms, sent out from earth, Will end mid-century's 'iron curtain' era by bringing the entire globe under constant surveillance."

News Specialists of the Associated Press, 'How Experts Think We'll Live in 2000 A.D.', 1950

" Space travel is utter bilge."

Dr. Richard van der Reit Wooley, Astronomer Royal, UK space advisor to the government, 1956. (Sputnik orbited the earth the following year.)

" Space travel is bunk."

Sir Harold Spencer Jones, Astronomer Royal, UK, 1957 (Sputnik orbited the earth two weeks later.)

" Man will never reach the moon regardless of all future scientific advances."

Dr. Lee De Forest (inventor of the vacuum tube), 1957

" To place a man in a multi-stage rocket and project him into the controlling gravitational field of the moon where the passengers can make scientific observations, perhaps land alive, and then return to earth - all that constitutes a wild dream worthy of Jules Verne. I am bold enough to say that such a man-made voyage will never occur regardless of all future advances."

Lee deForest, American radio pioneer and inventor of the vacuum tube, Feb 25, 1957.

" There is practically no chance communications space satellites will be used to provide better telephone, telegraph, television or radio service inside the United States."

T.A.M. Craven, Federal Communications Commission (FCC) commissioner, 1961

" [Predicting life in 2014...] For that matter, you will be able to reach someone at the moon colonies, concerning which General Motors puts on a display of impressive vehicles (in model form) with large soft tires intended to negotiate the uneven terrain that may exist on our natural satellite. Any number of simultaneous conversations between earth and moon can be handled by modulated laser beams, which are easy to manipulate in space. On earth, however, laser beams will have to be led through plastic pipes, to avoid material and atmospheric interference."

Engineers will still be playing with that problem in 2014. Conversations with the moon will be a trifle uncomfortable, but the way, in that 2.5 seconds must elapse between statement and answer (it takes light that long to make the round trip). Similar conversations with Mars will experience a 3.5-minute delay even when Mars is at its closest. However, by 2014, only unmanned ships will have landed on Mars, though a manned expedition will be in the works and in the 2014 Futurama will show a model of an elaborate Martian colony."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" In Rand's Delphi study, 82 scientists agreed that a permanent lunar base will have been established long before A.D. 2000 and that men will have flown past Venus and landed on Mars."

Time Magazine article, 'The Futurists: Looking Toward A.D. 2000', 1966

" The ability to carry out scientific observations at a distance is developing so rapidly that I don't see any unique role for man in planetary exploration."

Gordon MacDonald, National Academy of Sciences, August 1968 [seven weeks before the first manned Apollo mission]

" I don't think the human race will survive the next thousand years, unless we spread into space."

Stephen Hawking, theoretical physicist and cosmologist, 2001

" The important thing is that we build a self-sustaining city on Mars as quickly as possible. The key threshold is when that city can continue to grow, continue to prosper, even when the supply ships from Earth stop coming at that point, even if something would happen on Earth. That is the critical civilization threshold. I think it can be done in 20 years. You are going to need on the order of a million people, maybe a million tons of cargo."

Elon Musk, founder of SpaceX, March 2025

" We'll land humans on Mars in 2029. I stake my reputation on it. If we don't make it, you can call me a fraud."

Elon Musk, founder of SpaceX, September 2025



TANKS

" [In 100 years...] Huge forts on wheels will dash across open spaces at the speed of express trains of to-day. Giant guns will shoot twenty-five miles or more, and will hurl anywhere within such a radius shells exploding and destroying whole cities. Submarine boats submerged for days will be capable of wiping a whole navy off the face of the deep. Balloons and flying machines will carry telescopes of one-hundred-mile vision with camera attachments, photographing an enemy within that radius. These photographs, as distinct and large as if taken from across the street, will be lowered to the commanding officer in charge of troops below."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900

" The idea that cavalry will be replaced by these iron coaches is absurd. It is little short of treasonous."

ADC to Field Marshal Haig, at a tank demonstration, 1916

" If you want to seize terrain, you need a tank."

Colonel Markus Reisner, Austrian armed forces, April 2024

" A \$5,000 drone can destroy a \$5 million tank."

Eric Schmidt, ex-CEO of Google, October 2024

" It's pretty obvious ... that the tank is still an important part of the battlefield."

Conrad C. Crane, senior historian and acting editor-in-chief at USAWC Press, March 2025



TELEPHONES

" I watched his countenance closely, to see if he was not deranged and I was assured by other Senators after we left the room that they had no confidence in it."

Senator Smith of Indiana, on witnessing a telegraph demonstration by Samuel Morse, 1842

" Well informed people know it is impossible to transmit the voice over wires and that were it possible to do so, the thing would be of no practical value."

Editorial in the Boston Post, 1865

" A man has been arrested in New York for attempting to extort funds from ignorant and superstitious people by exhibiting a device which he says will convey the human voice any distance over metallic wires so that it will be heard by the listener at the other end. He calls this instrument a telephone. Well-informed people know that it is impossible to transmit the human voice over wires."

News item in an 1868 New York paper

" It's a great invention but who would want to use it anyway?"

President Rutherford B. Hayes after a demonstration of Bell's telephone

" What use could this company make of an electrical toy? "

William Orton, President of Western Union, responding to Alexander Graham Bell's offer to Western Union of the exclusive rights to the telephone for \$100,000 in 1876

" This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us. The idea is idiotic on the face of it. Furthermore, why would any person want to use this ungainly and impractical device when he can send a messenger to the telegraph office and have a clear written message sent to any large city in the United States?"

William Orton, President of Western Union, internal memo, 1876

MEDIA AND TECHNOLOGY QUOTES

" The Americans have need of the telephone, but we do not. We have plenty of messenger boys."

Sir William Preece, Chief Engineer, British Post Office, 1876

" Don't talk with your ear or listen with your mouth."

Rochester Telephone Exchange Directory, USA, 1879

" We offer the business men of Rochester an absolutely perfect system of speaking communication with each other, by which the utmost secrecy is assured. The advantages of such a system in the saving of time and labor, and the expedition of business, are obvious."

Edward Hall, Rochester Telephone Exchange, USA, 1879 (3 years after the invention of the telephone)

" The telephone has become an actual business necessity."

The Union and Advertiser newspaper, Rochester, USA, 1886

" [In 100 years...] Wireless telephone and telephone circuits will span the world. A husband in the middle of the Atlantic will be able to converse with his wife sitting in her boudoir in Chicago. We will be able to telephone to China quite as readily as we now talk from New York to Brooklyn. By an automatic signal they will connect with any circuit in their locality without the intervention of a "hello girl"."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900

" The telegraph is a kind of very long cat. You pull his tail in New York and he is mewling in Los Angeles. Radio operates in exactly the same way, except there is no cat."

Albert Einstein, 1924

" When wireless is perfectly applied the whole earth will be converted into a huge brain, which in fact it is, all things being particles of a real and rhythmic whole. We shall be able to communicate with one another instantly, irrespective of distance. Not only this, but through television and telephony we shall see and hear one another as perfectly as though we were face to face, despite intervening distances of thousands of miles; and the instruments through which we shall be able to do this will be amazingly simple compared with our present telephone. A man will be able to carry one in his vest pocket."

Nikola Tesla, interview with Collier's magazine, USA, 1926

" [In 50 years...] The telephone will be transformed from wire to radio and will be equipped with the visuality of television. Who's on the other end of the line will seldom be a mystery. Every pedestrian will have his own walking telephone – an apparatus housed in a wallet-sized kit."

News Specialists of the Associated Press, 'How Experts Think We'll Live in 2000 A.D.', 1950

" [By 2000...] Your personal telephone will be small enough to carry in your handbag. Your house telephone will record messages, answer simple inquiries, and transmit vision."

Robert Heinlein, Science Fiction author, Galaxy Magazine, February 1952

" Just what form the future telephone will take is, of course, pure speculation. Here is my prophecy: In its final development, the telephone will be carried about by the individual, perhaps as we carry a watch today. It probably will require no dial or equivalent, and I think the users will be able to see each other, if they want, as they talk. Who knows but what it may actually translate from one language to another."

Mark R. Sullivan, President of the Pacific Telephone & Telegraph Co., 1953

" [Predicting life in 2014...] Communications will become sight-sound and you will see as well as hear the person you telephone. The screen can be used not only to see the people you call but also for studying documents and photographs and reading passages from books. Synchronous satellites, hovering in space will make it possible for you to direct-dial any spot on earth, including the weather stations in Antarctica."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" Cellular phones will absolutely not replace local wire systems."

Martin Cooper, researcher and executive at the Motorola company, 1981

" Everyone's always asking me when Apple will come out with a cellphone. My answer is, 'Probably never'. I have friends who worked on the Palm Treo. And to this day, my gut churns to recall the hell they went through. The problem is that when you build a cellphone, the carriers (Verizon, Cingular, etc.) have veto power over EVERY move you make. You have to fight, wheedle, cajole, beg, demo, refine, lather, rinse, repeat...all in hopes that the carriers will accept your design—and

stock your phone. I cannot imagine Apple giving veto power to ANYONE over its software design. It just ain't gonna happen."

David Pogue, technology writer, New York Times, 2006 (one year before the launch of the Apple iPhone)

" There's no chance that the iPhone is going to get any significant market share. No chance."

Steve Ballmer, Microsoft CEO, 2007

" I think the biggest change, and one that we're already starting to see take shape, is that globally the majority of internet usage will be done via a mobile device and for most people the mobile web will be their primary ~ if not their only ~ way of experiencing the internet."

Peter Rojas, co-founder of technology blogs Gizmodo and Engadget, June 2011

" I think the trend in computing is to become more ubiquitous, more natural, more social, so you want to be able to interact with the people around you, and I think that's probably going to be the next major platform after phones. ... Just like everyone who upgraded to smartphones, I think everyone who has glasses is pretty quickly going to upgrade to smart glasses over the next decade. And then I think it's going to start being really valuable, and a lot of other people who aren't wearing glasses today are going to end up wearing them, too. ... There will come a time when your smartphone is more often in your pocket than out of it. I think this will happen in the 2030s, and while you could still complete tasks on your phone in a more comprehensive or efficient way, users will choose the convenience of glasses to get it done."

Mark Zuckerberg, CEO of Meta, September 2024



TELEVISION

" While theoretically and technically television may be feasible, commercially and financially I consider it an impossibility, a development of which we need waste little time dreaming."

Lee DeForest, American radio pioneer and inventor of the vacuum tube, 1926

" Television? No good will come of this device. The word is half Greek and half Latin."

C. P. Scott 1846-1932

" Television won't matter in your lifetime or mine."

Rex Lambert, The Listener, Editorial, 1936

" Television in the home is now technically feasible. The difficulties confronting this difficult and complicated art can only be solved from operating experience, actually serving the public in their homes."

David Sarnoff, RCA, October 1938

" The average American family hasn't time for television."

The New York Times, 1939

" I do not believe television will come to stay until the picture shown is sufficiently larger, cleaner and more detailed to permit a family of five to see what is going on, without exerting any great amount of effort on their part."

L. Waters Milbourne, WCAO Baltimore, US, 1944

" Television won't be able to hold on to any market it captures after the first six months. People will soon get tired of staring at a plywood box every night."

Darryl F. Zanuck, President, 20th Century Fox, 1946

" I have lived through several periods of development in the fields of communication and entertainment. I remember the day when wireless as a service of transoceanic communication was regarded by some as a joke. Those who owned cables could not see wireless as a competitor of

cables. Who would entrust important messages to a medium that was filled with static? I lived through the day when the Victor Talking Machine Company could not understand how people would sit at home and listen to music that someone else decided they should hear. And so they felt that the 'radio music box' and radio broadcasting were a toy and would be a fancy. I saw the same thing happen in the field of talking motion pictures. It was urged by many that people would not go to a movie that made a lot of noise and bellowed through an amplifier and disturbed the slumber of those who enjoyed the silent movie...and then – in 1927 – came Warner Brothers with 'The Jazz Singer' and Al Jolson. Almost overnight a new industry was born. Today, who goes to a silent movie? Let me assure you, my friends, after more than forty years of experience in this field of communications and entertainment, I have never seen any protection in merely standing still. There is no protection except through progress. Therefore, may I leave you with this final thought: I would suggest that you reflect carefully and thoughtfully upon the possible ultimate effects of television upon your established business if you do nothing, and of the great opportunities for your present and future businesses if you do the right thing!"

David Sarnoff, President, NBC, 1947

" Television won't last. It's a flash in the pan."

Mary Somerville, pioneer of radio educational broadcasts, 1948

" [In 50 years...] Television's influence will be tremendous. Industry leaders like Cecil B. DeMille and Dore Schary cautiously predict a 'marriage' of films and TV. Some think television will kill only smaller theaters. But if there is a system whereby viewers can be charged for parlor video pictures, others say, there will be no theaters left.

News Specialists of the Associated Press, 'How Experts Think We'll Live in 2000 A.D.', 1950

" [Predicting life in 2014...] As for television, wall screens will have replaced the ordinary set; but transparent cubes will be making their appearance in which three-dimensional viewing will be possible. In fact, one popular exhibit at the 2014 World's Fair will be such a 3-D TV, built life-size, in which ballet performances will be seen. The cube will slowly revolve for viewing from all angles."

Isaac Asimov, 'Visit to the World's Fair of 2014', August 1964

" Television, radio, and all the sources of amusement and information that surround us in our daily lives are also artificial props. They can give us the impression that our minds are active, because we are required to react to stimuli from the outside. But the power of those external stimuli to keep us going is limited. They are like drugs. We grow used to them, and we continuously need more and more of them. Eventually, they have little or no effect. Then, if we lack resources within ourselves, we cease to grow intellectually, morally, and spiritually. And when we cease to grow, we begin to die."

Mortimer J. Adler, philosopher and author, 1970

" By 1990, the [TV] cable will touch all parts of human life: it will allow students to attend school three days a week, letting them learn at home on the other days over two-way TV."

Marvin Cetron and Thomas O'Toole, Encounters with the Future, 1982

" By the end of the decade multi-channel cable television will be commonplace in-home countrywide - TV will be used for armchair shopping, banking, calling emergency services and many other services."

Kenneth Baker, Minister for Information & Technology, UK, 1982

" Significant numbers of BT's 23 million residential customers could be linked to the service (interactive TV) by 1995, which would severely dent terrestrial viewing figures."

Media International, February 1994

" People who use their interactive screens to book a salmon-fishing holiday in Scotland might switch on a baseball game the next day to find themselves watching advertisements for outdoor clothing or fly-fishing equipment in the commercial break. Over time interactive television would build up such accurate profiles of individuals from their viewing and buying habits that every advertisement would be individually tailored to meet their wants and needs. One commercial might suggest you book a table at Lutece's for your wedding anniversary tomorrow; another could recommend a Hermes tie to match that shirt you bought last week; a third might remind you that you usually change your car around this time and suggest you look at the new Lexus."

Prof. Nicholas Negroponte, Media Lab, MIT, May 1994

" TV is, at bottom, a passive experience - which is its beauty"

Viacom spokesman, 1995

" Interactive TV is like having a baby - easier to conceive than deliver."

John Enser, media lawyer, 1995

" It's like going into a restaurant, having the chef point to the ingredients and saying: 'Here they are, now cook the meal yourself.' Is that what audiences want? TV audiences want to stay passive."

Helmut Thoma, Managing Director, RTL Plus GmbH, 1995

" Digital TV will bring an era of high value, interactive multimedia services, bringing substantial benefits to the UK economy. Consumers will be able to call down special-interest programmes, take out electronic season tickets to follow their home football team, conduct home shopping, even alter camera angles to track a favourite star."

Ian Taylor, Minister for Science and Technology, December 1996

" The digital satellite product has been the hottest consumer electronics launch in the history of the US, and will attract similar response here [the UK]."

Sam Chisholm, Chief Executive, British Sky Broadcasting, 1996

" There is no solution in sight. I am very pessimistic about the digital market."

Bernd Kundrun, Chief Executive, Premiere (German digital TV station), February 1997

" It is still going to be quite a while before we have interactive digital TV."

Bill Gates, Chairman and CEO, Microsoft, March 1997

" This new venture will open up the information age to the television viewer, not just the PC user."

Rupert Gavin, Multimedia Services Director, BT (on the launch of BIB), May 1997

" You have to develop approaches that are independent of the technology because we don't know what technology will win through. Its like VHS and Betamax. All you knew at the time was that video would be important."

Jerry Wright, Marketing Director, Home Care Products, Lever Brothers, May 1997

" Television is a more natural environment for electronic commerce than the Internet because the mass market is already familiar with it."

Stuart Ross, Marketing Development Manager, Boots, May 1997

" We are going to lead the world in this UK operation...it is the template for everywhere else."

Sam Chisholm, Chief Executive, BSkyB (on the launch of BIB), May 1997

" The market for Web-enabled televisions is vanishingly small."

Josh Bernoff, Forrester Research, 1997

" Willingness to pay will have a ceiling and I don't think it will be remotely high enough in the foreseeable future to provide secure, reliable income for entrepreneurs to take the risk of starting hundreds of expensive high quality niche services"

Michael Grade, Chief Executive, Channel 4, 1997

" There are some markets that need Goliaths to open them up, not Davids."

Sam Chisholm, Chief Executive, BSkyB, (commenting on digital TV), May 1997

" It's going to be difficult in two to three years' time to spot the difference between the Web and television."

David Docherty, Deputy Director of Television, BBC, September 1997

" People using their TVs are sitting ten feet away, they are not going to be doing a whole lot of interacting, they just want to see stuff coming down at them."

Marc Andreessen, Netscape, January 1998

" The sort of application I foresee is someone watching a soccer match between, say, the US and Mexico, and a message pops up offering them the chance to buy the Mexico strip. You could also chat with friends at the bottom of the screen during the game. Or if you were watching Seinfeld, for example, you could be automatically sent to the Seinfeld chat room at the end of the show. The advertiser who appeared during the TV show would also appear in the chat room."

Phil Monego, President, NetChannel, US, April 1998

" If you want to order an extra phone line, all you'll have to do is point and click. If you want to watch the Dennis Rodman/Karl Malone wrestling match, watch it free tonight on AT&T - point and click and you're an AT&T long-distance customer."

John Malone, Chairman, Tele-Communications Inc., June 1998

" Digital TV has destroyed the 'convergence theory'. For years now, the word convergence has gone side-by-side with digital, a convenient way of explaining how TVs and PCs will get married and live happily ever after. Well, I'm sorry to be the bearer of bad news, but there's been a divorce. It's increasingly clear that people's use of the TV and the PC are hugely different experiences. TV will continue to be the dominant medium for lean-back leisure rather than lean-forward interaction."

Elisabeth Murdoch, General Manager, Sky Television, UK, August 1998

" We don't think people want to watch the Internet over their television, we think they want to watch television over their television. We believe in entertainment and the power of television."

Mark Booth, Chief Executive, British Sky Broadcasting, UK, September 1998

" You go to your TV set when you want to turn your brain off. You go to your computer when you want to turn your brain on."

Steve Jobs, CEO, Apple Computer Inc., US, October 1998

" I think interactive television is doomed. It's a dead end."

Brenda Laurel, interaction and video game designer, February 1993

" I don't think we'll ever see a family huddled round the TV surfing the net."

Krista Johnson, Flextech Interactive, UK, January 1999

" We don't think Internet TV is going anywhere."

Sky Digital spokesman, UK, May 1999

" Generally we do not believe this (television) is the right medium for grocery home shopping."

James Millar, Food Ferry, UK, November 1999

" At the moment it can be cumbersome and slow to get around and buy things on the internet. When you just have to switch on your TV I think it's going to be huge."

Jan Sheperdson, Brand Director, Top Shop, UK, February 2000

" YouTube is the new television. But the 'new' television doesn't look like the 'old' television. It's interactive and includes things like Shorts (yes, people watch them on TVs), podcasts, and live streams, right alongside the sports, sitcoms and talk shows people already love."

Neal Mohan, CEO of YouTube, March 2025



TRAINS

" Rail travel at high speed is not possible because passengers, unable to breathe, would die of asphyxia."

Dr. Dionysus Lardner (1793-1859), Professor of Natural Philosophy and Astronomy at University College, London

" What can be more palpably absurd than the prospect held out of locomotives traveling twice as fast as stagecoaches? "

The Quarterly Review, England, 1825

" Dear Mr. President: The canal system of this country is being threatened by a new form of transportation known as 'railroads' ... As you may well know, Mr. President, 'railroad' carriages are pulled at the enormous speed of 15 miles per hour by 'engines' which, in addition to endangering life and limb of passengers, roar and snort their way through the countryside, setting fire to crops, scaring the livestock and frightening women and children. The Almighty certainly never intended that people should travel at such breakneck speed."

Martin Van Buren, Governor of New York, 1830

" No one will pay good money to get from Berlin to Potsdam in one hour when he can ride his horse there in one day for free."

King William I of Prussia, 1864, on hearing of the invention of trains

" [In 100 years...] Trains will run two miles a minute normally; express trains one hundred and fifty miles per hour. To go from New York to San Francisco will take a day and a night by fast express. There will be cigar shaped electric locomotives hauling long trains of cars. Cars will, like houses, be artificially cooled. Along the railroads there will be no smoke, no cinders, because coal will neither be carried nor burned. There will be no stops for water."

John Elfreth Watkins Jr., What May Happen in the Next Hundred Years, 1900



" Everything that can be invented has been invented."*

Charles H. Duell, U.S. Commissioner of Patents, 1899

**An example of a quote out of context. He was requesting a funding increase because of the load of patent applications, arguing that those denying him funding must believe that "everything that can be invented has been invented".*

" Stocks have reached what looks like a permanently high plateau."

Irving Fisher, Professor of Economics, Yale University, 1929

" Gaiety is the most outstanding feature of the Soviet Union."

Joseph Stalin, General Secretary of the Communist Party of the Soviet Union, 1935

" An important scientific innovation rarely makes its way by gradually winning over and converting its opponents. What does happen is that its opponents gradually die out, and that the growing generation is familiarised with the ideas from the beginning."

Max Planck, Theoretical Physicist, 1949

" The Great Mutation, or historical change, has taken place so rapidly, and life has sustained such sudden and radical alterations (in the long course of time) that we are now suffering something like historical amnesia. In the present century, first Western civilization and now the entire globe have witnessed the inexorable substitution of an artificial environment and a materialistic outlook on life for the old natural

environment and spiritual world view that linked us so irrevocably to the Recent and Distant Pasts. So pervading and complete has been this change, and so complex has life become—I almost said overwhelming—that it now appears probable that mid-nineteenth-century America or Western Europe had more in common with fifth-century Greece (physically, economically, socially, mentally, spiritually) than with their own projections into the middle of the twentieth century. Is it possible that so short a time can alter the condition of man?"

Carl Bridenbaugh, historian, December 1962

" According to Darwin's Origin of Species, it is not the most intellectual of the species that survives; it is not the strongest that survives; but the species that survives is the one that is able best to adapt and adjust to the changing environment in which it finds itself."

Leon C. Megginson, Professor of Management and Marketing at Louisiana State University at Baton Rouge, 1963

" If an elderly but distinguished scientist says that something is possible he is almost certainly right, but if he says that it is impossible he is very probably wrong."

Arthur C. Clarke, science and science fiction writer, August 1969



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I founded Croft Analytics in 2020 following many years in senior research roles at Publicis Groupe companies. Latterly I was Global Research Lead at Publicis Media where I worked with agency teams and clients across many categories and countries.

Since 1996 I have been a Fellow of the UK's Institute of Practitioners in Advertising (IPA).



Croft Analytics

<https://www.croftanalytics.com>

Croft Analytics is a marketing and media consultancy that provides tools for marketers to track brands across social and search platforms.

Share of Searching - <https://www.shareofsearching.com> – is a search trends tool for tracking brand visibility across Google, YouTube, Bing, and Amazon. It charts trends in search volumes and % share of search for brands in any country.