The end note: The shifting balance between health, safety, and financial concerns

By Stephen Rogers
The shifting balance between health, safety, and financial concerns

Some research and insights have a short shelf life, while others continue to gain color and context. In each issue of Deloitte Insights Magazine, we look back on research we published and ideas we pitched, and evaluate whether they’ve stood the test of time.

By Stephen Rogers
Managing director of Deloitte’s Consumer Industry Center

What we said then

“In the span of a few months, what started as a global health crisis morphed into an economic one as well. It’s been more than a century since the world has seen these two forces so intertwined. We do not expect to see a return to normal, or even a new normal, until total concern descends from its elevated level and financial concerns overtake those of immediate health and safety.”

In the throes of a dual-front crisis: Establishing the road to a global consumer recovery, Deloitte Insights, April 2020.

What we say now

We’re still in a dual-front crisis, according to the Deloitte Global State of the Consumer Tracker. However, after lagging behind for the better part of two years, financial stress is now overpowering health and safety concerns as the primary determinant of consumers’ decision-making by quite a strong margin.

Following omicron, global pandemic anxiety subsided dramatically among the 23,000 respondents across 23 countries who participated in our monthly consumer survey. Consumers’ perceived safety of doing everyday things like going to the store quickly reached two-year highs, and it continues to improve with each passing month.¹

At the same time, record inflation continued unabated, exacerbated by geopolitical conflict. And with government stimulus programs no longer around to help consumers make ends meet, financial sentiment metrics have begun flashing warning signals. Globally, financial anxiety is high—as is concern around inflation, and consumers’ level of savings and credit card debt.² In some countries, including the United States, China, and England, discretionary spending intentions are weakening.³

In many ways, consumer businesses face similar challenges compared to early pandemic days. They still need the agility to respond to rapidly changing consumer behavior. And few can predict the extent of the financial headwinds that lie ahead.

Even as the pandemic gradually fades, many companies are finding that prepandemic financial and forecasting models no longer work. The “new normal” remains elusive.●
Endnotes

**Where global execs stand on making health equity a business priority**


**The potential impact of a broken DEI promise**

1. Jennifer Tonti and Jill Mizell, “95% of Black Americans agree that it’s important for companies to promote racial equity. 80% believe they can do more,” JUST Capital, April 1, 2021.


**Making smartphones live longer—and greener**

1. We have used a range of publicly available information to arrive at this prediction. For CO2e emissions per device and the split by production, use, transport, end-of-life processing, see Apple, *iPhone 12 product environmental report*, October 13, 2020; Huawei, “Product environmental information,” accessed April 25, 2022; Google, Pixel 5: *Product environmental report*, accessed October 6, 2021. For 2022 smartphone shipments information, see International Data Corporation, “Smartphone shipments to grow 5.5% in 2021 driven by strong 5G push and pent-up demand, according to IDC,” March 10, 2021.

2. The market for mobile phone insurance is forecast at US$29.5 billion globally in 2022, with a base value of US$23.3 billion in 2020, and a CAGR of 12.6%. *Grand View Research, Mobile phone insurance market size, share & trends analysis report by coverage, by phone type, by region, and segment forecasts, 2021–2028*, April 2021.

**Data-protection tech that helps AI fulfill its potential**

1. This article and *Deloitte Insights Magazine* are independent publications and have not been authorized, sponsored, or otherwise approved by Apple Inc.


**Automation won’t end the labor shortage**


2. Ibid.

3. Ibid.

**The new supply chain equilibrium**


2. Ibid.

3. Ibid.

4. Ibid.

**Why reporting workplace well-being metrics is a good idea**


**Employee health contributes to organizational health**


5. Steve Hatfield, Jen Fisher, and Paul Silverglate, *The C-suite’s role in well-being:*
How health-savvy executives can reimagine workplace wellness— for themselves and their people, Deloitte Insights, June 22, 2022.


David Villa, “How celebrating success can lead to more of it,” Forbes, May 12, 2022.

Gene Marks, “Four ways small businesses can support child and dependent care for their workers,” Philadelphia Inquirer, May 9, 2022.


Kelsey Griffin, “Are you taking the right foundational steps toward an inclusive workplace?,” Forbes, April 18, 2022.


Katie Kuehner-Hebert, “Employees who participate in wellness programs are healthier, at least,” BenefitsPRO, May 21, 2018.

Gebreyes et al., Activating health equity.

Smart cities, smarter public health

5. United Nations, “68% of the world population projected to live in urban areas by 2050, says UN,” May 16, 2018.
10. Ibid.
11. Ibid.
15. Antunes, Barroca, and de Oliveira, Urban

future with a purpose.

16. Ibid.
17. Ibid.

Thinking about investing in the metaverse? Let history be your guide

2. US Census Bureau, Quarterly retail e-commerce sales: 4th quarter 2021, February 18, 2022, pp. 1–3.

The importance of sharing success—and stress—metrics

3. Ibid.

Incentives are key to breaking the cycle of cyberattacks on critical infrastructure

7. For a description of how increasing tech balkanization encourages nation-state cyberattacks, see Jesse Goldhammer et al., Leading the way with an adversary focus: Government’s role in deterring cyberattacks, Deloitte Insights, August 4, 2021. For more on how geopolitical tensions can drive cyberattacks, see CISA Insights, “Increased geopolitical tensions and threats,” January 6, 2020.
15. Our categorization of incentives comes from Stephen Levitt and Stephen Dubner’s book Freakonomics, in which they categorize three basic flavors of incentive: economic, social, and moral. Our categorization of the levers that can shape those incentives is a combination of Lawrence Lessig’s norms, markets, laws, and architecture, and Bruce Schneier’s moral, reputational, institutional, and security.
16. Catalin Cimpanu, “Netherlands can use intelligence or armed forces to respond to ransomware attacks,” Record, October 7, 2021; Sean Gallagher, “Candid camera: Dutch hacked Russians hacking DNC, including security cameras,” ARS Technica, January 26, 2018.
21. Ibid.
23. The inherent tension between wanting more/better services and where funding for those services should come from can be seen in research by the Pew Research Center. Pew Research Center, “Little public support for reductions in federal spending,” April 11, 2019; Pew Research Center, “In a politically polarized era, sharp divides in both partisan coalitions,” December 17, 2019.
26. Examples of such exercises and tools include those from the E-ISAC (Maggie Miller, “Hundreds participate in electric grid cyberattack simulation amid increasing threats,” Hill, November 18, 2021) and FS-ISAC (FS-ISAC, “Exercises: Build stronger plans and a more resilient business,” accessed May 12, 2022).


P70–83

Investing in creative potential

1. An ecological approach is one that is focused on the relationship between the individual and the systems in which they act, a relationship that is seen as interdependent. Ecological psychology is an embedded, situated, and nonrepresentational approach pioneered by J. J. Gibson and E. J. Gibson.

2. The Four P’s framework—where creativity is framed as an emergent property of person, process, place (in the original), and product—was first discussed in M. Rhodes, “An analysis of creativity,” The Phi Delta Kappan 42, no. 7 (1961): pp. 305–10.

3. Rhodes’s original article calls this setting “press” rather than “place,” the idea being that there are pressures (or influences) on our behaviors. While it’s true that the social and physical context we find ourselves in influences our creative behavior; it is also true that some of these influences are not necessarily environmental. Consequently, it is common for press to be replaced by place, as we have throughout this essay, as place is a more intuitive term; ibid.

4. A useful, and short, definition for innovation is “the economic exploitation of creativity.”


7. Problem-posing is a technique where an issue is framed and framed to try and identify and define the core challenge. It is commonly used in both education pedagogy and design.

8. It’s for this reason that the 1978 Superman film has a long section at the start showing the challenges Clark Kent faces when trying to fit into society while having superpowers.


10. What we have referred to as “cognitive diversity” is often called “functional diversity” in the literature; ibid.

11. Thanks to Peter Williams—a charted accountant—for the analogy.

12. Traditionally, this has been approached through office-space design, from inspirational decor to collaborative tools such as stages, small auditoriums, and floor-to-ceiling whiteboards. But increasingly, place can be just as much virtual as physical as organizations invent new ways to collaborate digitally, perhaps even in the imagined metaverse of coming years.

13. The first report in this series, Unshackling the creative business, discussed how creativity in business is contingent, in that the creativity of one team depends on the creativity of others; see Peter Evans-Greenwood et al., Unshackling the creative business: Breaking the tradeoff between creativity and efficiency, Deloitte Insights, April 9, 2021.


15. The authors developed on “investment opportunity” in the previous essay in the series Setting the stage for creative performance. The intention with “investment opportunity” is to put creativity on an equal footing with efficiency in an organization’s operating model by creating a metric for creativity to balance cost-benefit; see Peter Evans-Greenwood et al., Setting the stage for creative performance: Improving creativity in business by measuring creativity, Deloitte Insights, October 29, 2021.


20. We might compare this to the Four-C Developmental Trajectory for creativity, which breaks the development of creativity into a journey from Mini-C (personal creativity) through Little-C (everyday creativity) and Pro-C (professional creativity) to Big-C (legendary creativity). See Ronald A. Beghetto, James C. Kaufman, and John Baer, Teaching for Creativity in the Common Core Classroom (New York: Teachers College, Columbia University, 2014), pp. 21 and 27.

21. Such as a pandemic. Indeed, this series was triggered by the observation (toward the end of the first year of the pandemic) that many otherwise “creative” organizations struggled to respond creatively, while some organizations not particularly known for their creativity provided creative and innovative responses.
little or no increase in generation reserves
(see American Clean Power Association,
AWEA US wind industry annual market report,
year ending 2013, 2013). MISO has been able to integrate huge amounts of wind
without adding power plants to back up its renewable energy production, partly because
MISO is a large balancing area with many different energy resources available (see Glen
Anderson, “Integrating renewable energy,”
National Conference of State Legislatures,
June 20, 2016). The IEA could not be any
closer: No additional dispatchable capacity
ever needs to be built because VRE is in the
system. On the contrary, to the extent of the
capacity credit of VRE, its addition to the
system reduces the need for other capacity
(see American Clean Power Association,
“News roundup: A carbon-free Iowa energy
boom, renewable integration is easy, wind and
solar work together,” March 5, 2014).

17. Variable renewable energy (VRE) refers to
utility-scale wind and solar resources as well as
distributed solar PV. Distributed wind is also a
VRE, but volumes are low, and data was not
available for this analysis.

18. EIA, “Detailed state data,” July 30, 2021; EIA,
“Small-scale PV estimate,” July 9, 2021.

19. Ibid.

20. Electrification scenario data from NREL, The
North American renewable integration study:

21. Deloitte, Managing variable and distributed
clean energy resources: A new era for the grid,

22. IRENA, Innovation landscape for a renewable-
powered future, February 2019.


24. Silvio Marcacci, “Denmark may hold the key
to integrating large amounts of intermittent

25. Asma Aziz et al., “Issues and mitigations of wind
energy penetration network: Australian network
case study,” Journal of Modern Power Systems

26. Eric Martinot, “How is Denmark integrating and
balancing renewable energy today?,”
Martinot.info, January 2015.

27. Midcontinent Independent System Operator
(MISO), “Corporate fact sheet,” accessed May 10,
2022.

$2.5B underground transmission line, to bring Iowa wind to PJM, MISO,”

29. Iowa Environmental Council, “Iowa wind

30. MISO, “Corporate fact sheet.”

31. Iowa Environmental Council, “Iowa wind
energy fact sheet.”

32. Ibid.

33. Deloitte analysis based on data from MISO,
“MISO interactive queue,” accessed May 10,
2022.

34. Ideal Energy, “Renewable hydrogen,”

35. California ISO, Root cause analysis: Mid-
While some have attributed California’s
electricity supply shortages to VRE, the
causes appear more related to demand
surges from unprecedented multistate heat
waves coinciding with wildfires that
constrained transmission and triggered
systemwide failures (for more details, see Ken
Silverstein, “Green energy is not among the
culprits behind California’s energy crisis,”
Forbes, September 8, 2020). Nevertheless,
California’s plans to prevent future shortages
include accounting for the state’s changing
generation mix.

36. Ca.gov, “Distributed energy resources,”

37. Edith Hancock, “California amends grid
mapping process to make it easier to site
distributed energy resources,” Energy Storage

38. Western Energy Imbalance Market, “Home page,”

39. Morgan Lewis, Energy storage procurement
tracker, June 2021.

40. BloombergNEF, “Battery pack prices cited
below $100/kWh for the first time in 2020,
while market average sits at $137/kWh,”

41. Jeff St. John, “Biden admin aims to make the
US a world leader in lithium-ion batteries,”

42. Bob Davis, “Biden to deter forced labor with
ban on China’s solar-panel materials,” Wall

43. Daniel Moore, “Biden links his climate, trade
goals in comment on making wind turbine
blades in Pittsburgh,” Pittsburgh Post-Gazette,
April 29, 2021.

44. Lawrence Berkeley National Laboratory, Wind
energy technology data update: 2020 edition,
August 2020, p. 30.

45. Wood Mackenzie, Global wind turbine supply

46. Mike Short and James Mancini, “Overcoming
the 5 supply chain barriers that threaten the
growth of renewable energy,” C.H. Robinson

energy demand for critical minerals set to soar
as the world pursues net zero goals,” press

48. Ibid.

49. Ibid.

50. IEA, The role of critical minerals in clean
energy transitions, May 2021.

51. Adriaan Davidsie and Jacek Guzek, Trend 10:
Meeting demand for green and critical

52. Claudiu C. Pavel et al., “Substitution
strategies for reducing the use of rare earths
in wind turbines,” Resources Policy 52 (2017):
p. 349–57.

53. Sissi Cao, “Panasonic, GM show off cutting
edge electric vehicle batteries, cobalt-free,”

administration announces Supply Chain
Disruptions Task Force to address short-term
supply chain discontinuities,” press release,
June 8, 2021.

55. Miranda Willson, “Biden’s ‘Buy America’ plan
may hit a solar wall,” Politico Pro, March 1, 2021.

56. Melissa R. Allen-Dumas, Binita KC, and
Colin Cuniffl, Extreme weather and climate
vulnerabilities of the electric grid: A summary
of environmental sensitivity quantification
methods, Oak Ridge National Laboratory,
August 16, 2019.

57. National Oceanic and Atmospheric
Administration, Billion-dollar weather and

58. Aaron Larson, “Prepare your coal plant for cold
weather operations,” Power, October 1, 2014.

59. Sunrun, “Do solar panels work in cold
weather?,” November 29, 2021.

60. Collin Eaton, James Rundle, and David Uberri,
“U.S. pipeline shutdown exposes cyber threat to

61. Alexandra Van Dine, Michael Assante, and
Page Stoutland, Outpacing cyber threats,
Nuclear Threat Initiative, January 1, 2016.

62. Andy Greenberg, “Researchers found they could

63. The White House, “Executive order on
improving the nation’s cybersecurity,” May
12, 2021.

64. US Department of Energy (DOE), Roadmap

65. Anmar Frangoul, “Renewable electricity
generation is growing—but it’s not enough
to meet rising demand, IEA says,” CNBC, July
15, 2021.

66. Frost & Sullivan, “Global digital grid (sensors,
metrics, and communications) growth
opportunities,” August 20, 2021, pp. 50–51.

67. Brad Plumer, “A glimpse of America’s future:
Climate change means trouble for power

68. Edison Electric Institute, “The clean energy
transformation: Electric companies are leading
the way,” accessed May 10, 2022.

69. Stanley Porter et al., Utility decarbonization
strategies: Renew, reshape, and refuse to zero,

70. Deloitte analysis of data from S&P Global
Market Intelligence.

71. Joseph Rand et al., Queued up: Characteristics
of power plants seeking transmission
interconnection as of the end of 2020, Lawrence
Berkeley National Laboratory, May 2021, p. 3.

72. IEA, “Form EIA-860 detailed data with
previous form data (EIA-860A/860B),”

73. Galen Barbose, U.S. renewables portfolio
standards, Lawrence Berkeley National Laboratory,
February 2021, p. 16.

74. DOE, “DOE announces $52.5 million to
accelerate progress in clean hydrogen,” July
7, 2021; Julian Spector, “Newsletter: DOE
goes long on long-duration storage,” Canary
Media, July 15, 2021; United States Senate, 117th Congress, 1st session, H.R.3684,
“Infrastructure Investment and Jobs Act,
Division D – Energy; Title III—Fuels and
Technology Infrastructure Investments,”

P88

The end note: The shifting balance between
health, safety, and financial concerns

1. Deloitte, “Global State of the Consumer

2. Ibid.

3. Ibid.