



**R. GARRISON HARVEY**

May 2023

Cirque Analytics  
Jackson Hole, WY  
(307) 205-5101 Harvey@CirqueAnalytics.com

Gary Harvey is the President and CEO of Cirque Analytics, an economic, statistical, and financial consulting company headquartered in Jackson Hole, WY and with offices in California and Washington DC. He received the Bachelor of Science degree in Applied Mathematics from the United States Air Force Academy and the Master of Science degree in Operations Research from the Air Force Institute of Technology.

He has served as an expert witness in litigation, arbitration, and regulatory proceedings involving evaluation of damages, commercial disputes, antitrust, sample design and analysis, payment card market analysis, payment card industry data analysis, TV broadcast data analysis, conjoint analysis, copyright infringement, patent infringement, consumer product performance, epidemiology, toxic tort analysis, insurance claims analysis, medical claims analysis, healthcare fraud claims analysis, victims of human trafficking, and class certification.

Additionally, he has worked as a consultant on numerous litigation and business consulting engagements including: antitrust, claims of false advertising, unfair competition and monopolization, consumer product safety and performance, conjoint analysis, environmental damage, disparate impact, insurance claims, medical claims, patent and intellectual property matters, automobile accident and performance, and intellectual property.

## **EDUCATION**

B.S. (Applied Mathematics) (1988), USAF Academy  
M.S. (Operations Research) (1992), Air Force Institute of Technology

## **PROFESSIONAL EXPERIENCE**

2021-Present President and CEO, Cirque Analytics  
1996- 2020 William E. Wecker Associates, Inc.  
President, Principal Consultant: 2020  
Vice President, Principal Consultant: 2000 - 2019  
Senior Consultant: 1996 - 1999  
1992 - 1995 Scientific Analyst, Officer USAF, Scott AFB, IL  
1992 - 1995 Adjunct Professor, Belleville Area College, Belleville, IL  
1992 - 1993 Total Quality Management Instructor, Officer USAF, Scott AFB, IL  
1990 - 1992 Graduate Student, Officer USAF, Air Force Institute of Technology  
1988 - 1990 Scientific Analyst, Officer USAF, Vandenberg AFB, CA

Jackson Hole, WY

Irvine, CA

Los Angeles, CA

Washington, DC

**SELECT EXPERT REPORTS, TESTIMONY, DECLARATIONS AND PROCEEDINGS**

- Testifying expert for Visa and major US banks (e.g., Bank of America, Barclays, Capital One, Citibank, Fifth Third, HSBC, JPMorgan Chase, PNC, SunTrust, and Wells Fargo) involving billions of dollars of claimed damages in the Payment Card Interchange Fee and Merchant Discount Antitrust Litigation. Issues involved damage calculations, payment card market analysis, profitability, but-for world benchmarks and big data analysis.
- Testifying expert for Visa in EMV Fraud Liability Shift Antitrust Litigation. Issues involved damage calculations, payment card market analysis, and big data analysis.
- Testifying expert for Visa in litigation with credit card cobrand partner. Issues involved damage calculations, breach of contract, consumer product performance, credit card market analysis and profitability.
- Testifying expert for Major League Baseball, National Football League, National Basketball Association and Women's National Basketball Association in 2014-17 Cable Royalty Distribution Proceedings. Analyses of broadcast data to determine the relative economic value of programming and the allocation of cable royalty revenues.
- Testifying expert for Visa and major US banks in Payment Card Interchange Fee and Merchant Discount Antitrust Litigation vs. Grubhub Holdings Inc., et al.
- Testifying expert for Visa and major US banks in Payment Card Interchange Fee and Merchant Discount Antitrust Litigation vs. Sears Holdings.
- Testifying expert for Visa in Pulse (Discover Card) vs. Visa litigation. Issues involved damage calculations, debit card market analysis, and big data analysis.
- Testifying expert for class certification and liability for National Collegiate Athletic Association (NCAA) in class action litigation involving claims of disparate impact arising from the Academic Performance Program (APP) penalization of college sports teams.
- Testifying expert for Major League Baseball, National Football League, National Basketball Association and Women's National Basketball Association in 2010-13 Satellite Royalty Distribution Proceedings. Issues involved sample analysis of Nielsen data to determine the relative economic value of programming and the allocation of satellite royalty revenues.
- Testifying expert for Major League Baseball, National Football League, National Basketball Association and Women's National Basketball Association in 2010-13 Cable Royalty Distribution Proceedings. Issues involved sample analysis of Nielsen data to determine the relative economic value of programming and the allocation of cable royalty revenues.
- Testifying expert for Blue Cross Blue Shield Kansas City in health care claims dispute regarding alleged healthcare fraud.
- Testifying expert for Monsanto in a toxic tort case involving environmental contamination (PCBs) impact on human health, medical costs, and medical monitoring damages.
- Analyses of 25 years of confidential university admissions and financial aid data including linking and anonymizing student records among 17 top Universities (e.g., Yale, MIT, Brown, Columbia, Dartmouth, Duke, Georgetown, Johns Hopkins, University of Chicago, Vanderbilt, etc.) in the 568 Cartel litigation.
- Testifying expert in copyright infringement case. Issues involved Hierarchical Bayes Choice-Based conjoint analysis, product feature valuation and impact of market share, sample design and analysis.

- Testifying expert at the Food and Drug Administration (FDA) Center for Tobacco Products (CTP), Tobacco Products Scientific Advisory Committee (TPSAC), modified risk tobacco product application. Testimony unanimously endorsed by FDA healthcare experts and FDA authorized the Modified Risk Tobacco Product. Involved epidemiological analysis of reduced risk tobacco products effects on morbidity and mortality.
- Testifying expert for RAI Services Company to analyze the Food and Drug Administration's (FDA) proposed rule "Tobacco Product Standard for Menthol in Cigarettes" that proposes a tobacco product standard that would prohibit menthol in cigarettes.
- Testifying expert for Allianz SE Insurance Company in asbestos coverage litigation for historical products and operations claims. Issues involved sample design and analysis, products/operation insurance coverage, forecasting, and primary and excess insurance policy allocation analysis.
- Testifying expert for Altria, Philip Morris USA, Inc., R.J. Reynolds Tobacco Company, and ITG Brands, LLC, and the National Association of Convenience Stores ("NACS") in case brought by the United States Department of Justice. Issues involved survey design and analysis including analysis of U.S. census data and Census Bureau's American Community Survey (ACS).
- Testifying expert for BP Solar International, Inc. in class action litigation. Issues involved damage calculations, product failure analysis, sample design, sample analysis and forecasting.
- Testifying expert for Chase Bank in litigation with major retail cobrand partner. Issues involved damage calculations, consumer product performance, forecasting, credit card market analysis and profitability of card portfolio.
- Testifying expert for victims in human trafficking case involving Trafficking Victims Protection Act (TVPA) and Fair Labor Standards Act (FLSA).
- Testifying expert for firearms manufacturers in litigation on gun sales and tracing. Issues involved sample design and analysis, the relationship between gun availability and crime, and forecasting.
- Testifying expert for R.J. Reynolds Tobacco Company in class action litigation. Issues involved epidemiology, data analysis, survival analysis, association of smoking cessation and disease risk.
- Testifying expert for Bay Area News Group in litigation related to alleged copyright infringement. Issues involved sample design and analysis.

**SELECT CONSULTING EXPERIENCE**

- Analysis of payment card partnerships, profitability, and future market share in disputes between Visa, US issuing banks versus American Express and Discover Card.
- Numerous projects evaluating conjoint analyses applications to estimate of value of product features, value of images, change in market share and willingness to pay arising from features of various products.
- Analysis of Deepwater Horizon oil spill in Gulf of Mexico, historical engineering designs, drilling plans, procedures, performance, and mishaps.
- Analyses of ground water contamination and role of mitigation.
- Analyses of insurance coverage related to environmental chemical exposure.
- Analyses of healthcare costs and disease attributable to asbestos exposure.
- Tobacco Health Care Cost Recover Cases in the US and internationally. Analyses to assess various methods to estimate disease and health care costs attributable to various risk factors, role of various risk factors on historic and future health care costs, disease risk of smoking and role of smoking cessation, financial analyses, historic and future health care costs, detailed analysis of hospital and medical treatment data.
- Litigations involving low-tar and light cigarettes delivery of tar and nicotine, differential biomarker levels attributable to tar levels, health risks, tar levels effects on smoking behaviors and damages.
- Analyses of automobile performance, determining size and scope of automotive recalls, accident epidemiology, and damages analyses for Ford, GM and Fiat Chrysler.
- Effect on automobile sale prices of information related to alleged component defect.
- Analysis of GEICO automobile insurance underwriting and pricing model.
- Analyses of consumer product performance and safety related to windows, solar panels, house siding, cell phones, office products, hospital products, and other products.
- Analyses of strategic war fighting capability associated with alternative Air Force aircraft fleet structure, effect on warfighting scenarios and relative costs trade-offs. Presented analyses to members of congress, Joint Chiefs of Staff, Secretary of Defense, Deputy Secretary of Defense, and numerous other governmental and military organizations.
- Analyses of prescription drug formulation, and clinical studies in patent dispute cases.
- Analysis of gasoline formulation and role of manufacturing process in patent dispute.
- Analyses of rocket reliability, accuracy and navigation reliability.
- Analyses of methods to increase efficiency, decrease costs and decrease delays in Air Force air transportation for the U.S. Transportation Command.
- Evaluation of potential new joint-service wargaming models at the request of the Secretary of the Air Force.

## **HONORS**

Meritorious Service Medal (MSM).

Air Mobility Command Officer of the Year, 1993.

Young Leadership Award, US Air Force, 1994.

Barchi Prize, 1994 Military Operations Research Society.

Best Application of Operations Research/Management Science Achievement Award, The Institute for Operations Research and the Management Sciences (INFORMS), St. Louis, 1993.

Outstanding Cadet Intercollegiate Speech Competition & Team Captain, USAFA, 1988.

## **PUBLICATIONS AND NON-TESTIMONY PRESENTATIONS**

“Constrained System Optimization and Capability Based Analysis” (with K. Bauer, J. Litko), Military Operations Research, Vol 2, No 4, 1997, pp. 5-19.

“Military Modeling and Simulation: Reflections and Directions”, 1994 Winter Simulation Conference Proceedings, pp. 741-743.

“Constrained System Optimization and Capability Based Analysis”, 62nd Military Operations Research Society, National Meeting, 1993.

“Force Allocation Through Constrained Optimization”, 61st Military Operations Research Society, National Meeting 1993. Awarded Best Working Group Paper.

“Experimental Design Considerations in the Optimization of Stochastic Response Surfaces”, Sponsored Session presentation, TIMS/ORSA Joint National Meeting, Chicago 1993.

“C-141 Depot Maintenance: Using Simulation to define Resource Requirements” (with T. Schuppe, D. McElveen, P. Miyares), Air Force Journal of Logistics, Winter-Spring 1993, pp. 11-15.

“Force Allocation Through Constrained Optimization of Stochastic Response Surfaces” (with K. Bauer, J. Litko), 1992 Winter Simulation Conference Proceedings, pp. 1121-1129.

“C-141 Depot Maintenance: Using Simulation to Define Resource Requirements” (with T. Schuppe, D. McElveen, P. Miyares), 1992 Winter Simulation Conference Proceedings, pp. 1145-1152.

“Plane Symmetry Groups” (with D. Jensen), Department of Mathematical Sciences, United States Air Force Academy, June 1988.

Invited lectures various university and analytical groups.