

Decision Automation and Macroeconomic Data Flows Used to Create Governance Resilience

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Abstract

The algorithm used in this study was created for the American stock market to improve closed investment funds' efficiency. Its secondary output was a workable and sustainable model that could be partially scaled to fit solutions for problems involving automated decision making at the government level. This model is comparable to a basic business intelligence and provides a way to identify the best course of action for expediting the development of a solution. The model mimics the economic sectors that make up a simulated national economy and is based on companies listed on the NASDAQ, NYSE, and LSE because these offer the best examples of transparency and trustworthy audits. Difficulties emerged in the early 2000s with regard to the stimulation of economic growth. Interestingly, the probability of a low return on development increases with the level of economic development. By simulating an economy and developing scalable models to forecast crises, promote development, and revitalise financial markets, especially in regions where they have encountered challenges, is it possible to establish a transparent economic model? The prevailing perspective on the future for the last three decades has revolved around the pursuit of economic expansion via capitalism. Across the annals of time, the primary objective of the human race has been to amass prosperity and elevate the quality of life for posterity. In the midst of political realm-exceeding societal expectations, there is a demand for substantial change in pursuit of a more promising future. Collaboration between the public and private sectors is essential for reorienting and revitalising the capitalist system. By simulating an economy and developing scalable models to forecast crises, promote development, and revitalise financial markets, especially in regions where they have encountered challenges, is it possible to establish a transparent economic model?

Keywords

Resilience, governance, decision automation, growth.

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Introduction

During the early 2000s, challenges arose in stimulating economic growth. Interestingly, the more advanced the economy, the higher the chance of a low return on development (Bodislav, 2024). How can we establish a transparent economic model through simulating an economy and developing scalable models to predict crises, foster growth, and revitalize financial markets, particularly in areas where they have struggled? Over the past thirty years, the vision for the future has been centered around economic growth through capitalism (Bayar et al., 2022 & Stefan et al., 2024). Throughout history, the main focus of humanity has been to generate wealth and enhance the standard of living for upcoming generations (Bodislav, 2016). Amidst societal expectations surpassing the political realm, there is a call for significant change towards a brighter future. Collaboration between public and private sectors is crucial in revitalizing the capitalist system and steering it back on course.

Literature review

Questioning capitalism can be done by pointing out the significant earnings gap between a company's CEO and newly hired personnel, which averages 750 times higher. This disparity highlights social inequalities. Additionally, income redistribution is often inefficient, as funds are not always invested in creating a better future but rather maintaining the current status quo.

For the capitalist system to sustain its long-term vision, it must undergo reform, starting with healthcare, education, pension, and social insurance systems, particularly when considering the global viewpoint (Bran et al., 2014). Commencing the collaboration between the public sector (execution availability) and the private sector (implementation availability) is essential.

There is a global trend towards creating a corporate and social capitalist model that leverages localized solutions and expands them for broader application through government ministries and economic policies (Bodislav et al., 2021). Considering the time frame for implementation is crucial in this context. In industrialized nations, the public sector's economic vision often has a finite life span before being altered to align with the objectives of the private sector, particularly in terms of speculative investment (Bodislav, 2011). In this context, Schumpeter's concept emphasizes the importance of a corporate model in enhancing the stability of an emerging economy and reducing the necessity for government interference. A corporate model offers increased security for a nation, region, or union of states. By ensuring that the private sector maintains the connection between market demands and overall supply, a predictable cycle of demand is established. To ensure the overall welfare of society, it is important to consider both the well-being of the general public and corporations, while maintaining a balance that does not jeopardize the societal well-being as a whole.

Connections are formed between the government and private industry. To prevent the economy from overheating, it is crucial to maintain the connections that form the unique structure of capitalist economies and sustain economic growth at a steady pace. Let's revisit one of Schumpeter's concepts: the notion of sustainable economic growth at a rate of 2% annually (as indicated in the research conducted on the 1890–1940 period, which encompasses the unsustainable growth of 3.8% annually before the crisis, during the 1890–1929 timeframe) (Schumpeter, 2011). To investigate the viability of capitalism without specifically addressing democracy, it is important to consider the effectiveness of political democracy in ideal situations (Becker, 2003). This theory highlights the conceptual alignment between democracies and capitalism, suggesting that a flawless democracy mirrors the free enterprise system in any market. The efficiency in ensuring the functionality of an economic sector surpasses what the government or political party can achieve, as discussed by Bran et al. (2014), shaping the development of this vision (Hafner et al., 2020). Explaining why only one industry is being used as an example instead of the entire economy is due to the approach to competition in a democracy. There are parallels between the connections within an economy and its sectors, and those within a corporation and its divisions. The specialization in purpose leads to a more efficient output, managed by individuals within the corporation.

Innovation is crucial for a thriving economy as it drives progress, creates new possibilities, enhances infrastructure, inspires employees, rejuvenates companies, and extends consumer lifespans through groundbreaking products and services. Applying a method to choose and confirm generated data, we can analyze a portion of the model related to technological progress (both hardware and software), categorize it as a shift from private to public sector, and then suggest viable solutions for the market (Bodislav, 2024).

In this modern age of fast-paced technological advancements and the continuous evolution of human behavior with the help of primary A.I. (Artificial Intelligence), there is a strong focus on analyzing data to address economic growth challenges (Bodislav, 2015).

Utilizing Business Intelligence (BI) variables can help identify and address non-technical issues (Boyer et al., 2010). To move past a purely technical perspective and its representation in a traditional economic framework, we outline potential issues that could arise: There seems to be a disconnect between executive vision and the political culture, hindering the direct implementation of SAAS (software as a service) or BI technologies. The lack of functional connections between these technologies and the disjointed solutions used at the macroeconomic level are resulting in limited coverage and high costs. Contrary to ROI, the investment's value is not immediately evident. Internal culture within a corporation or government ministry may hinder the implementation of innovative business intelligence (BI) solutions, thus impeding new businesses from entering the government-influenced macroeconomic sector (Bodislav, 2015; Georgescu et al., 2021). Another concern is that without following the core principles of the discipline, we may jeopardize the effectiveness and expenses related to BI services. Achieving success in executing macroeconomic policies as projects under BI supervision is the outcome of a combination of various factors.

Research Methodology on Financial data analysis and Business Intelligence included in the Business-Automated Data Economy Model

The Internet's foundational technologies are driving a rise in interdisciplinary innovation. Illustrating with examples such as Gordon Moore's law, which indicates that the electricity needed to power a processing unit decreases by half every 18 months, it becomes evident that a business trend following Moore's law will inevitably lead to costs nearing zero. This approach involves harnessing solar power to increase its cost efficiency compared to electricity generated from fossil fuels. According to Moore's law, computing power is expected to grow exponentially without limits, a corollary that was uncovered four decades ago by Carvey Mead, a professor at Caltech. It was discovered by Mead that the cost of transistors decreases by half every 18 months. The cost of one transistor in a contemporary Intel processor with octa-core technology has significantly decreased from the high prices in 1960 to a minuscule amount today (Bodislav, 2016). Mead highlighted the importance of efficiently utilizing transistors. Based on previous research, it was noted that Mead's theory remains relevant. Prior to the 2020 pandemic, the price of transistors decreased by half every 12 months starting from 2014. However, following the pandemic and the semiconductor crisis, this rate has slowed to nearly 18 months. This shift coincides with a slowdown in investment in Research & Development, leading companies and universities to delay progress in favor of short-term profitability. Despite the discomfort associated with the term "waste", not only the IT sector of the 1970s faced this issue. A whole cohort of professionals was taught to build computers in an inefficient way, disregarding the idea of "waste." There has never been a free lunch, and there still isn't one today, but computers did not adhere to this principle. Mead predicted a future where the abundance of transistors would lead to a significant drop in their price, almost to the point of being negligible (Bhide, 2006).

In 1986, a computer cost around \$20 million, while today an iPhone 15 Pro is 25 times faster and 30 times less expensive, resulting in an 800 million-fold increase in computing power per US dollar. Considering all perspectives, it is rational to anticipate sustained exponential growth over the next two decades, factoring in the latest advancements at that point.

Significant investments are currently being directed towards the IT sector, not only to develop advanced automated response systems (akin to RPA - Robotic Process Automation) for future use, but also to establish a proactive workflow capable of addressing and preventing any systemic anomalies.

When the tractor was first introduced on the farm a hundred years ago, economists made gloomy forecasts: increased unemployment, a decrease in agricultural jobs, and a transition in the labor market from human to technological resources (Georgescu, 2020). What transpired in that situation? Despite common misconceptions, numerous new job openings have emerged.

Karl Marx foresaw the practical advantages of evolution and supported its adoption to accelerate the coming of the future. Despite having insights into the future, John Maynard Keynes was limited by the strong path dependency of his time. As a result, he focused on depicting the functional aspects of the future and highlighting its influence (Keynes, 1936).

According to Bodislav (2016), the computer, rather than the tractor, is poised to become the primary agricultural machine in the future. This transformation will impact jobs as we currently know them, reshaping them and paving the way for new ways to ensure income for future job seekers, much like the shift from mechanics to quantum physics and the upcoming use of quantum processing computers.

In a study by Kurzweil and Lane (2014), two predictions were made: AI will surpass human capabilities by 2030, and biological intelligence will self-limit by 2045. What implications does this have for the application of economics in practical settings? It suggests that the initial individuals to be automated include those employed in the service sector, like traffic controllers, taxi drivers, truck drivers, and waiters.

Recessions can have a lasting impact, resulting in a shift from labor to capital. However, when economic growth picks up again, production returns to its usual pattern, leading to a decrease in workload, permanent job losses. Starting with Joseph Schumpeter (2011), economists have utilized scientific methods to achieve sustainable, market-independent growth that can be channeled towards developing nations. Discussing theories of financial growth that suggest the economy can be advanced through various intangible aspects such as financial derivatives, cryptocurrencies, tokenization, service demand, and the information economy, which replaced Robert Solow's earlier theory from the 1980s. They all originate from the ancient school of economic philosophy, reaching as far as the Austrian branch of the discipline. Evolution's intangible aspect propels progress by embracing innovation to steer humanity towards a future that minimizes losses and focuses on strategic actions at various levels.

How can a country be established practically without unification processes, national identity, and historical reliance?

Analyzing a nation's economic development often hinges on its macroeconomic indicators, while the overall quality of life plays a significant role in its path to progress. Developing new systems that operate based on the real economy's production activity, rather than on investment vehicles with no real foundation like financial derivatives or cryptocurrencies, is crucial (Burlacu et al., 2022). Examining the basis of this idea involved setting up a test economy with enterprises representing sectors relevant to a fast economic growth.

Moreover, the subsequent businesses were incorporated into the development of the hypothetical macroeconomic model: the Business-Automated Data Economy Model (B.A.D.E.M.). This research builds upon the initial phase conducted in August 2011 and has been validated in previous studies. The current version of B.A.D.E.M. being utilized in this model is in its 9th iteration and has undergone 11 years of testing (refer to Table 1).

Table no. 1. Financial entities that are part of BADEM

No.	Company Name	Indicator	Business Profile
1.	Schweitzer-Mauduit International	SWM	Premium paper
2.	Paramount Gold and Silver Corp.	PZG	Rare metals mining
3.	Goldcorp Inc	GG	Rare metals mining
4.	First Majestic Silver Corp	AG	Silver mining
5.	SPDR Gold Trust	GLD	ETF
6.	Telefonica SA	TEF	Telecom
7.	Stamps.com	STMP	Delivery services
8.	OpenTable	OPEN	Online Reservations
9.	Google Inc.	GOOG	Internet Search & SAAS
10.	Watsco	WSO	AC technologies
11.	Town Sports International Holdings	CLUB	Fitness
12.	Steven Madden	SHOO	Footwear
13.	Ross Stores	ROST	Discount Stores
14.	Nordstrom	JWN	Fashion Retailer
15.	Men's Wearhouse	MW	Men's suits
16.	Maidenform Brands	MFB	Fashion & Retail
17.	LuLulemon Athletica	LULU	Technical Fashion
18.	Watson Pharmaceuticals	WPI	Pharmaceuticals
19.	Techne Corporation	TECH	Biotechnology
20.	On Assignment	ASGN	HR Specialized Solutions
21.	Jazz Pharmaceuticals	JAZZ	Pharmaceuticals
22.	Cross (A.T.) Company	ATX	Writing instruments
23.	Western Refining	WNR	Refining
24.	Sunoco Logistics Partners	SXL	Oil 360
25.	Patterson-UTI Energy	PTEN	Energy production
26.	Exxon Mobil Corporation	XOM	Energy (exploration & production)
27.	Alon USA Energy	ALJ	Petrol (production & distribution)
28.	Templeton Russia Fund	TRF	Financial derivate
29.	Tanger Factory Outlet Centers	SKT	REIT
30.	Rayonier Inc.	RYN	Building materials
31.	Plum Creek Timber Company	PCL	Wood industry
32.	Medallion Financial Corp.	TAXI	Financial taxi business
33.	CME Group Inc	CME	Trading & Investment Banking
34.	Berkshire Hathaway (1/100)	BRK/A	Business Solutions
35.	Bank of America Corporation	BAC	Banking & financial services
36.	American Campus Communities Inc	ACC	REIT

37.	Westinghouse Air Brake Technologies Corporation	WAB	AC technologies
38.	MasTec	MTZ	Building grounds
39.	GSI Group	GSIG	Lasers & Electro-optical solutions
40.	Grupo Aeroportuario del Sureste	ASR	Aeroports
41.	General Electric Company	GE	Technology & Financial Services
42.	Embraer-Empresa Brasileira de Aeronautica	ERJ	Aviation 360
43.	Colfax Corporation	CFX	Pipelines
44.	Boeing Company	BA	Aviation development
45.	Bae Systems Plc	BAESY	Aerospace & Defense Systems
46.	3M Company	MMM	Technology Company
47.	Goldman Sachs Income Builder Fund A Shares	GSBX	Mutual funds
48.	Ultratech	UTEK	Innovation
49.	Stratasys	SSYS	3D printers
50.	Microsoft Corporation	MSFT	IT
51.	j2 Global	JCOM	Cloud Computing & SAAS
52.	International Business Machines Corporation	IBM	BI & Technical Innovation
53.	Intel Corporation	INTC	Microprocessors & chipsets
54.	CACI International	CACI	Enterprise Information Technology
55.	Apple Inc *	AAPL	PCs & multimedia devices
56.	ACI Worldwide	ACIW	Electronic Payments
57.	3D Systems Corporation	DDD	3D printers
58.	American Water Works	AWK	Utilities - water works

Companies marked in yellow were tradable when the model was created in August 2011 and launched in October 2011, but have since been acquired and privatized. The list comprises Goldcorp Inc., Stamps.com, Open Table, Town Sports International Holdings, Men's Wearhouse, Maidenform Brands, Watson Pharmaceuticals, Cross (A.T.) Company, Western Refining, Alon USA Energy Inc., Templeton Russia Fund, Plum Creek Timber Company, American Campus Communities Inc, Goldman Sachs Income Builder Fund A Shares, and Ultratech. The investment pool was structured to replicate an economy and foster natural growth. All companies are listed on the three main stock exchanges (LSE, NYSE, and NASDAQ).

Source: the authors having as reference Bodislav (2016).

Beginning with the assumption that the global economy is in a perpetual state of confusion and considering that the model operates on stock flow in a competitive market designed for it, an execution timeframe for the model was selected between August and September 2011. Considering investor optimism and the concentration of selected firms in the United States, these elements will play a role in determining the stock price. The model was confirmed to depict attractiveness as a low- to medium-risk investment fund and as a validation model for the intervention of corporate governance in state governance to create policies and implement economic models. Success could be achieved with annual growth of 25% in two stagnating markets (the American and European stock markets) with signs of a new recession not only in 2023, but also in 2012 and 2017.

The testing period for B.A.D.E.M. version 9 spans from October 3, 2011, to October 2, 2022 and has been deemed ideal for transitioning to the updated model certifying corporate efficiency. What was the rationale behind choosing this particular time frame? The financial transaction began with the speculative aspect commonly linked with the stock market in October (referred to as "Earnings Season", providing a prime chance for market players to make fast money by pursuing annual dividends for shareholders).

The model was circulated for eleven years, during which expectations were reduced worldwide to test its performance and eliminate the chance of it being an unexpected exception. In 2013, hitting the US debt limit and subsequently removing the cap led to an unexpected economic upturn, largely influenced by the FED. However, maintaining economic growth close to zero conveys a concerning signal to developed nations. When the COVID19 virus hit developed economies in March 2020, the Trump administration and Congress approved helicopter money operations to support macroeconomic policies. The model proved resilient enough to withstand this unexpected event and keep functioning in the short term.

Throughout the years, the model showed varying returns, with its lowest point occurring in the 2018–2019 timeframe and a significant overall performance of over 288% in eleven years.

Between 2011 and 2022, the global economy experienced an average annual growth rate of over 3.2 percent, while the United States saw a 2.2 percent average annual growth. In contrast, the European Union's 27 and 28 member states (before BREXIT) had less than 1 percent growth. Developing countries experienced economic growth ranging from 1% in Mexico to 8% in China within the global economy. However, the pandemic crisis significantly reversed these gains, pushing affected economies back by a minimum of 2 years. The data was analyzed using Bloomberg Professional, EUROSTAT, and World Bank databases and compiled into Table 2.

Table no. 2. Trends in global strategic stock markets from 2011 to 2022

No	Stock Market	Indicator	10.2011	10.2012	10.2013	10.2014	10.2015	10.2016	10.2017	10.2018	10.2019	10.2020	10.2021	10.2022	DELTA 11-22
1	NASDAQ	CCMP	2335,83	3120,04	3815,02	4430,19	4886,94	5292,41	6590,18	7788,45	7982,47	10793,28	14566,70	10815,44	
		DELTA		33,57	22,27	16,12	10,31	8,30	24,52	18,18	2,49	35,21	34,96	-25,75	363,02
2	S&P 500	SPX	1099,23	1445,75	1693,87	1946,17	2066,96	2153,74	2549,33	2885,57	2952,01	3319,47	4357,04	3678,43	
		DELTA		31,52	17,16	14,89	6,21	4,20	18,37	13,19	2,30	12,45	31,26	-15,58	234,64
3	DJIA	INDU	10655,30	13482,36	15133,14	16801,05	17763,24	18240,49	22773,67	26447,05	26573,72	27657,42	34326,46	29490,89	
		DELTA		26,53	12,24	11,02	5,73	2,69	24,85	16,13	0,48	4,08	24,11	-14,09	176,77
4	FTSE100	UKX	4944,44	5809,45	6437,50	6446,39	6833,46	7044,39	7522,87	7318,54	7155,38	6007,05	7027,10	6908,76	
		DELTA		17,49	10,81	0,14	6,00	3,09	6,79	-2,72	-2,23	-16,05	16,98	-1,68	39,73
5	CAC40	CAC	2926,83	3414,23	4158,16	4242,67	5074,14	4449,41	5359,90	5359,36	5488,32	4978,18	6517,69	5794,15	
		DELTA		16,65	21,79	2,03	19,60	-12,31	20,46	-0,01	2,41	-9,30	30,93	-11,10	97,97
6	NIKKEI225	NKY	8545,48	8786,05	14170,49	15661,99	19312,79	16860,09	20690,71	23783,72	21410,20	23360,30	28771,07	26215,79	
		DELTA		2,82	61,28	10,53	23,31	-12,70	22,72	14,95	-9,98	9,11	23,16	-8,88	206,78
7	DAX	DAX	5376,70	7305,86	8629,42	9195,68	11967,39	10490,86	12955,94	12111,90	12012,81	13116,25	15156,44	12765,61	
		DELTA		35,88	18,12	6,56	30,14	-12,34	23,50	-6,51	-0,82	9,19	15,55	-15,77	137,42
8	BE500	BE500	155,27	186,42	212,82	226,76	270,67	227,32	261,83	253,75	254,28	243,75	292,83	-	
		DELTA		20,06	14,16	6,55	19,36	-16,02	15,18	-3,09	0,21	-4,14	20,14		88,59
9	Hang Seng	HSCI	16250,27	20888,28	22984,48	23064,56	25275,64	23788,00	28379,00	27126,00	26110,00	24455,00	24575,64	17079,51	
		DELTA		28,54	10,04	0,35	9,59	-5,89	19,30	-4,42	-3,75	-6,34	0,49	-30,50	5,10
10	STOXX50	SXSE	2138,24	2492,48	2918,31	3106,42	3715,27	3000,57	3603,32	3345,51	3446,71	3283,69	4035,30	3348,26	
		DELTA		16,57	17,08	6,45	19,60	-19,24	20,09	-7,15	3,02	-4,73	22,89	-17,03	56,59
11	Shanghai Shenzen CSI300	SHSZ300	2557,08	2320,16	2409,04	2450,99	4124,78	3253,58	3836,53	3438,87	3852,65	4737,09	4866,38	3720,94	
		DELTA		-9,27	3,83	1,74	68,29	-21,12	17,92	-10,37	12,03	22,96	2,73	-23,54	45,52
12	BOVESPA Brasil	IBOV	50791,53	59222,08	53100,18	53518,57	53123,02	61109,00	76054,70	82321,50	102551,30	98289,70	112899,64	116134,46	
		DELTA		16,60	-10,34	0,79	-0,74	15,03	24,46	8,24	24,57	-4,16	14,86	2,87	128,65
13	BOLSA Mexico	MEXBOL	32966,23	41199,29	41300,66	44254,43	44202,94	47596,60	50302,96	48052,85	43416,90	36017,35	39190,00	45429,75	
		DELTA		24,97	0,25	7,15	-0,12	7,68	5,69	-4,47	-9,65	-17,04	8,81	15,92	37,81
14	KOSPI Korea	KOSPI	1706,19	1996,03	1999,47	1976,16	2029,07	2043,63	2394,47	2267,52	2020,69	2412,40	3019,18	2155,49	
		DELTA		16,99	0,17	-1,17	2,68	0,72	17,17	-5,30	-10,89	19,38	25,15	-28,61	26,33
15	Bucharest SE	BET	4240,47	4768,31	6029,94	7228,82	7101,95	6943,45	7984,32	8554,15	9441,52	9115,88	12633,19	7601,60	
		DELTA		12,45	26,46	19,88	-1,76	-2,23	14,99	7,14	10,37	-3,45	38,58	-39,83	79,26
	Total/Yielded Average		146533,82	176250,37	184779,68	194324,09	207477,58	212266,22	250997,90	260800,99	274414,68	267543,06	311941,83	291139,08	
	DELTA chain		100,00	20,28	4,84	5,17	6,77	2,31	18,25	3,91	5,22	-2,50	16,59	-6,67	
	DELTA base				26,10	32,61	41,59	44,86	71,29	77,98	87,27	82,58	112,88	65,18	
															116,83

Note: Numbers are crunched to show how things have changed in the real world (from 03.10.2011 to 02.10.2022).

Source: the authors having as reference Bodislav (2016).

Results and Discussions - Approach to Creating a Cutting-Edge Economic Framework

According to the economic simulation model, transitioning to corporate governance as a foundational element in shaping macroeconomic strategies to achieve sustainable economic growth leads to approximately a 100% increase in economic development returns. Encountering microeconomic constraints can hinder the rapid growth of aggregate demand and supply, leading to unsustainable overcharging of production facilities and a decrease in technical yields caused by the inability to meet market demand (Bodislav, 2016; Vladut et al., 2024). Key principles form the foundation of the algorithm, which can be applied to simulate a country's economy, especially a developing one, through Business Intelligence analysis and effective corporate governance strategies:

- One notable outcome is that using the model to establish a closed investment fund would yield a fund rated as Investment Grade (A level) by S&P, Moody's, etc., despite offering returns typical of high-risk investment funds (exceeding 25% per year).

- Another observation is that the results lean towards the macroeconomy; previous research has indicated a link between a corporate governance model that, if applied to government policies, determines the next steps to achieve growth objectives. There is a consistent improvement in governmental performance every 3–5 years due to the model's simulation of the national economy, developed with the assistance of the NASDAQ OMX platform and a specialized technical analysis. The model operates optimally within a 12-year period.

Conclusions

In the digital age, the Information Economy offers a significant competitive advantage by transitioning from analog to digitally savvy customers, reducing manufacturing costs, implementing price reductions, and minimizing inventories. When demand is accurately estimated and the offer is widely accepted, it can lead to minimal unsold inventory, boosting the company's competitive edge (Georgescu, 2023). This is particularly evident when examining the current semiconductor crisis and the challenges faced by global car manufacturers in delivering vehicles on time. Our interactions involve customers at both individual and corporate levels, including large corporations in business-to-business transactions. On a broader scale, countries function similarly to corporations, seeking to attract new investors. These investors could include other countries, corporations, or individuals looking to capitalize on improved job prospects.

Having a deep understanding of the market demand and aligning it with the supply is a key advantage in the digital information economy, as highlighted by Bodislav (2016). Regardless of whether the offer comes from a small, medium, or large business or from a state viewed as a corporation, this holds true.

Ensuring that business strategy is in line with economic or national strategy is crucial for achieving goals effectively. This involves closely following the organization's or nation's behavior, optimizing based on existing or potential risks, and utilizing business intelligence principles for automation.

Through testing different models, we found that our hypotheses and results all pointed towards the idea of decision automation, where decisions are made automatically using predetermined algorithms and focusing on accessing specific paths to enhance proactiveness in the work process. Decision automation plays a crucial role in mitigating the adverse effects of unexpected events, while being an integral component of the knowledge exchange process in the quantum revolution. Information is considered a versatile medium that can be directed towards various objectives, such as pandemics, economic crisis, global terrorism, natural disasters, and extremist policies implemented by developed nations.

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