THE BLOCKCHAIN ACADEMY

THE GLOBAL BLOCKCHAIN EMPLOYMENT REPORT

2021

Blockchain Technology Education Leader

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HIGHLIGHTS

- Big companies are using or will be using blockchain-based systems in optimizing processes
- Blockchain is at the top of the list when it comes to the top 10 hard skills in 2020 based on the Linkedin report
- Blockchain developer with an increase of 33x is the most emerging job in 2020
- The number of hires is slowly but steadily outpacing the price of BTC
- increase in global demand for blockchain developers is up by 300-500% yearly
- In the US, New York City and San Francisco have the most job openings, London and Berlin in the European market, Singapore and Hong Kong in the Asia market, and Buenos Aires in Latin America
- The United States is the leading country when it comes to the amount of blockchain-related jobs, followed by the United Kingdom and India
- The average annual income in the US for a blockchain developer is $136,000, followed by $87,500 in Asia and $73,300 per year in Europe
- The remote blockchain developers earn around $123,750
- Almost 38% of projects that launched a token sale in 2019 were based in Singapore due to its business-friendly regulations
- Blockchain developers can get a salary that's comparable with AI developers, but still, you don't need to be a developer to work in this space since over 40% of the jobs are non-technical
- The most needed roles are Engineering: 31%, Operations: 17%, Marketing: 13%, Design: 10%, Sales: 9%, Customer Support: 7%, Other: 13%

- Blockchain technology has been deployed across all sectors, with five industries accounting for 67% of total blockchain startups
- Finance is still the leading sector with 28%, followed by Healthcare, Energy, and Food/Agriculture are right behind it
- The top 5 biggest employers when it comes to blockchain jobs, respectively, are Deloitte, IBM, Accenture, Cisco, and Collins aerospace
- Exchanges, development, and mining firms account for 85% of professionals employed
- The largest companies that are currently employing are IBM, Microsoft, Visa, Coinbase, Circle, and ConsenSys
- Maturity of the blockchain, besides bigger demand for the currently existing roles, will bring openings for new job profiles

INTRODUCTION

People change around 12 jobs during their lifetime[1] and that number is increasing, especially for millennials.

Most people spend less than five years at a given job, so it's no wonder they're looking for promising career prospects and future-proof skills to build on. As we continue to see significant disruption to a range of industries and the global workforce, blockchain technologies have emerged as a viable long-term career option. For starters, blockchain professionals earn more than individuals in similar positions in other industries and verticals. Moreover, during Covid-19, we've seen a large-scale shift towards remote work. During this time, employees in blockchain-related positions were 22% more likely to get employed than candidates seeking more traditional roles.

Blockchain technology is a decentralized and transparent way of recording lists of transactions. It debuted on January 3, 2009, and got the most significant attention in 2017, during the cryptocurrency bubble. Blockchain technology's potential applications are endless, from online payments, product and business process transparency, substantial reductions in fraud and corruption, streamlined administrative processes, and its potential role in managing driverless cars. Blockchain jobs touch many skill sets and technical competencies and are increasingly gaining prominence in all industries. From highly specialized roles that require in-depth knowledge of different programming languages to project managers, business strategists, UX designers, and communications and marketing specialists.

Blockchain developers and engineers are currently the highest-in-demand roles. Still, the need for other job functions is rapidly growing. Salaries in the blockchain industry are much higher than those in related fields and job titles. But for aspiring professionals to fully capitalize on the tremendous potential and opportunities, essential blockchain and cryptocurrency professional development and skills training is recommended.

Whatever your past education, training, and experience, supplementing your core skill sets and competencies with blockchain knowledge will significantly support long-term career prospects.

[1] *https://www.bls.gov/news.release/pdf/nlsoy.pdf*
[2] *https://www.thebalancecareers.com/how-often-do-people-change-jobs-2060467*
[3] *https://angel.co/blog/how-to-get-a-job-at-a-crypto-startup*

MARKET OUTLOOK

The primary thing that affected everything related to the crypto market in the past and the same applied to job employment is the bitcoin price. Satoshi Nakamoto introduced bitcoin in 2009 and that's the first moment when attention for blockchain technologies skyrocketed. From then the increase in interest was slow and steady until 2017 when the price of bitcoin reached almost $20,000 and just recently at the end of 2021, we can see that the market is bullish again and the price just broke $42,000 while still going up. Today, everyone is talking about bitcoin and nobody wants to miss the opportunity to invest at the right time

SOURCE: COINMARKETCAP [4]

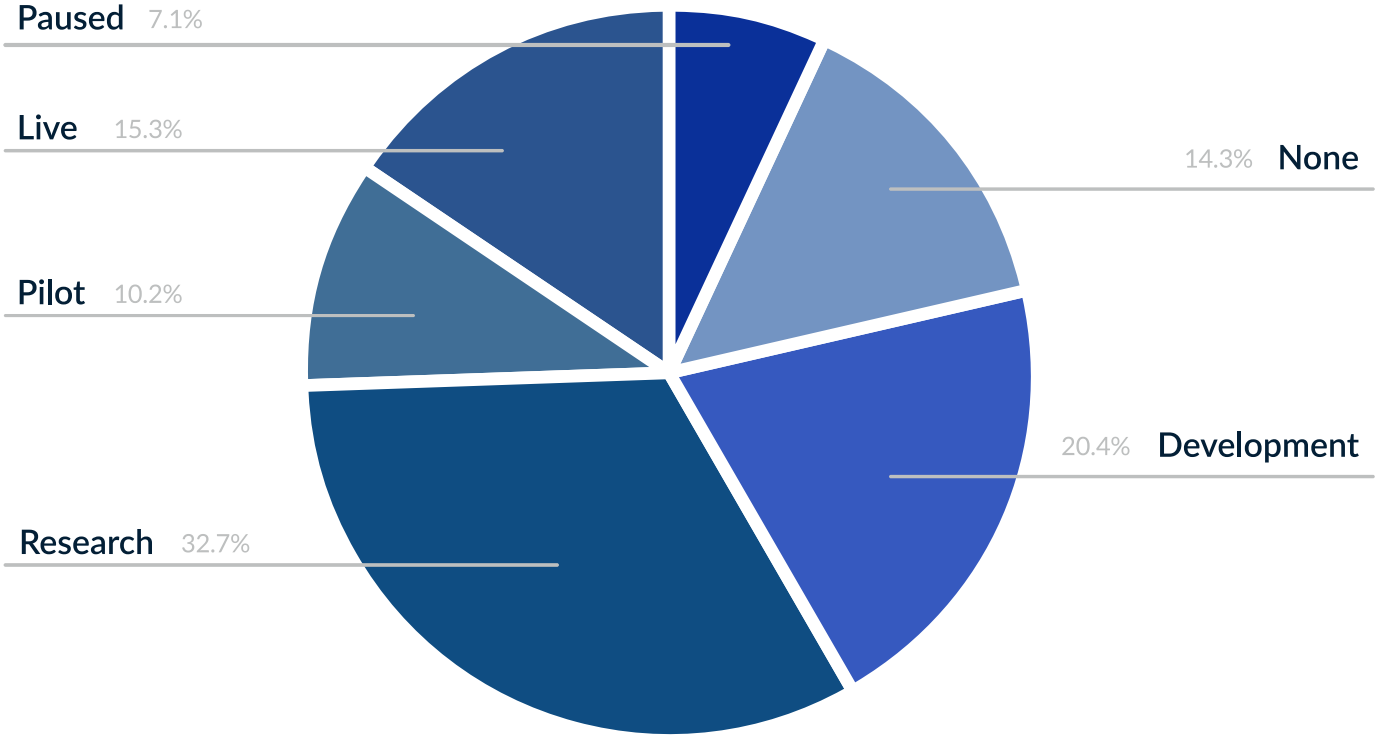
Blockchain technology provides various advantages as increased speed, transparency, reach, and reduced costs. Many credible forecasts as Gartner[5] are predicting that the coin market cap will be $3 trillion by 2030. Worldwide spending in the blockchain space is expected to grow to $15.9 billion by 2023 from $1.5 billion in 2018.

PwC surveyed 600 executives in 2018[6] and 84% of them have at least some level of involvement in the blockchain industry. Deloitte surveyed[7] 1488 senior executives from different companies in 2020 and 39% already implemented blockchain technologies into their products and services.

[4] *https://coinmarketcap.com/charts/*
[5] *https://www.idc.com/getdoc.jsp?containerId=prUS45429719*
[6] *https://www.pwc.com/gx/en/industries/technology/blockchain/blockchain-in-business.html*
[7] *Deloitte's 2020 Global Blockchain Survey*

That's an average increase of 16%, while from the companies with a revenue of over $100 million we can see an increase of 41%.

HOW FAR ALONG ARE COMPANIES WITH BLOCKCHAIN

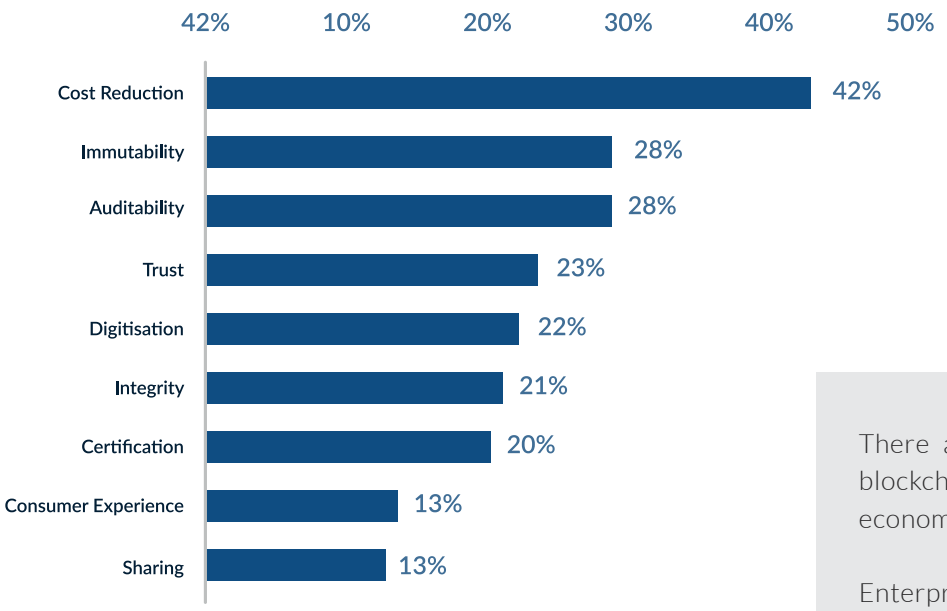


SOURCE: PWC STUDY [8]

[8] *https://www.pwc.com/gx/en/industries/technology/blockchain/blockchain-in-business.html*

BLOCKCHAIN IS SHAPING THE FUTURE OF THE ECONOMY

TOP THEMES FOUNDERS TACKLE WITH BLOCKCHAIN, % OF ANSWERS



SOURCE: LEADBLOCK PARTNERS[9]

There are significant indications that blockchain is shaping the future of the economy and here are some of them.

Enterprise software platforms that are using blockchain technology will help companies to improve data integrity, facilitate data sharing, and streamline processes. Many big companies are using or will be using blockchain-based systems in optimizing processes. A few of them which already started with integration are Microsoft, Oracle, Salesforce, and SAP.

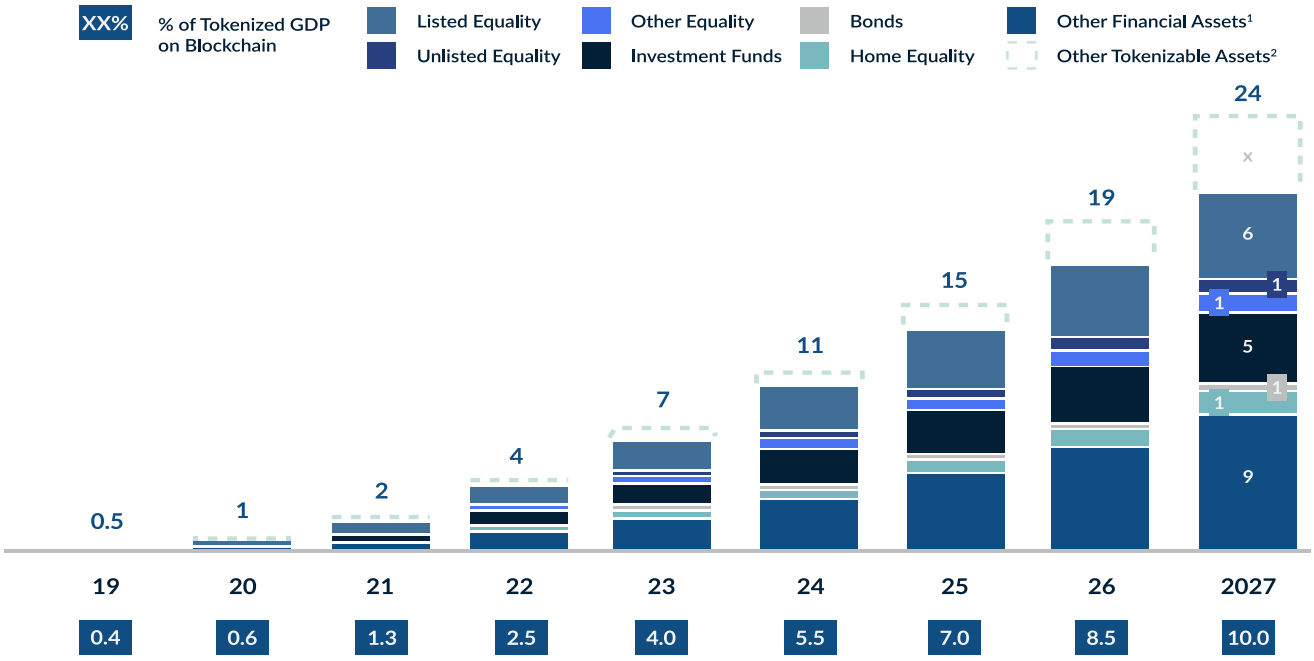
[9] *Enterprise Blockchain 2020*

ICOs (Initial Coin Offering) which is the crypto industry's equivalent for the IPO, raised more than $14 billion in 2018.[10] In the ICO company sells a predefined amount of coins during a public or private sale to launch an app, platform, or service.

Security is one of the biggest issues, nowadays, and blockchain is ready to meet those security needs, which leads to a higher demand for blockchain developers.

Tokenization represents physical or virtual assets in digital tokens on a blockchain. This concept is becoming more and more popular and now pretty much anything on the blockchain can be converted to digital tokens.

PROJECTED TOKENIZED MARKET VOLUME UNTIL 2027, IN $TRN BY ASSET CLASS



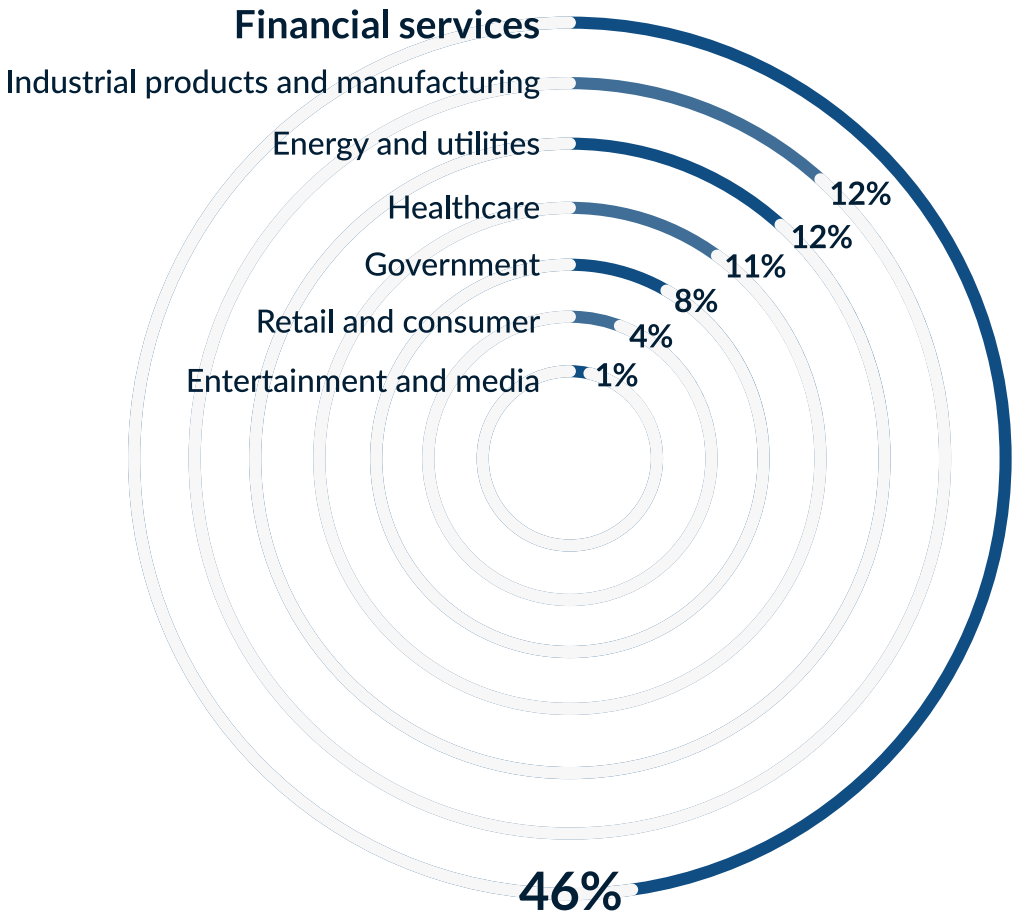
1 e.g. Insurance Policies, Pensions, Alternative Investments *2 e.g. Infrastructure Projects, Car Fleets, Patents*

SOURCE: HACKER NOON[11]

New territories and industries are emerging. Before 2017 blockchain was almost only in the finance sector but as the adoption increases we can see this emerging technology in various industries as well. Even though finance is still the leading sector there is growth and application in other sectors such as manufacturing and industrial products, the energy sector, and healthcare. Geographically, the US is the most advanced when it comes to the usage of blockchain currently, but in the future, with an increase of adoption, we expect an increase in usage in China and APAC region, as well.

[10] *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3512125*
[11] *https://hackernoon.com/market-outlook-on-tokenized-assets-a-usd24trn-opportunity-9bac0c4dfefb*

WHICH INDUSTRIES ARE SEEN AS LEADERS IN BLOCKCHAIN



SOURCE: HACKER NOON[12]

The Internet of Things (IoT) is getting increasingly adopted in the blockchain industry and according to Statista,[13] it is expected that we have 50 billion IoT devices worldwide which will enhance the demand for developers even further.

[12] *https://www.pwc.com/gx/en/industries/technology/blockchain/blockchain-in-business.html*
[13] *https://www.statista.com/statistics/802690/worldwide-connected-devices-by-access-technology/*

WHAT'S HOLDING THE GROWTH OF THE CRYPTO MARKET?

Even though the growth of bitcoin and the whole crypto market is pretty big, there are still some challenges that are not easy to overcome. Like any other emerging technology, there is a big skepticism about security, speed, standardization, and the reliability of blockchain.

One of the biggest obstacles is that, for many people, blockchain is abstract and highly technical. Looking at other emerging technologies like virtual reality or immersive reality users can try headsets and then they can visualize and experience the benefits that technology offers. In the blockchain, there is a slower learning curve due to its nature.

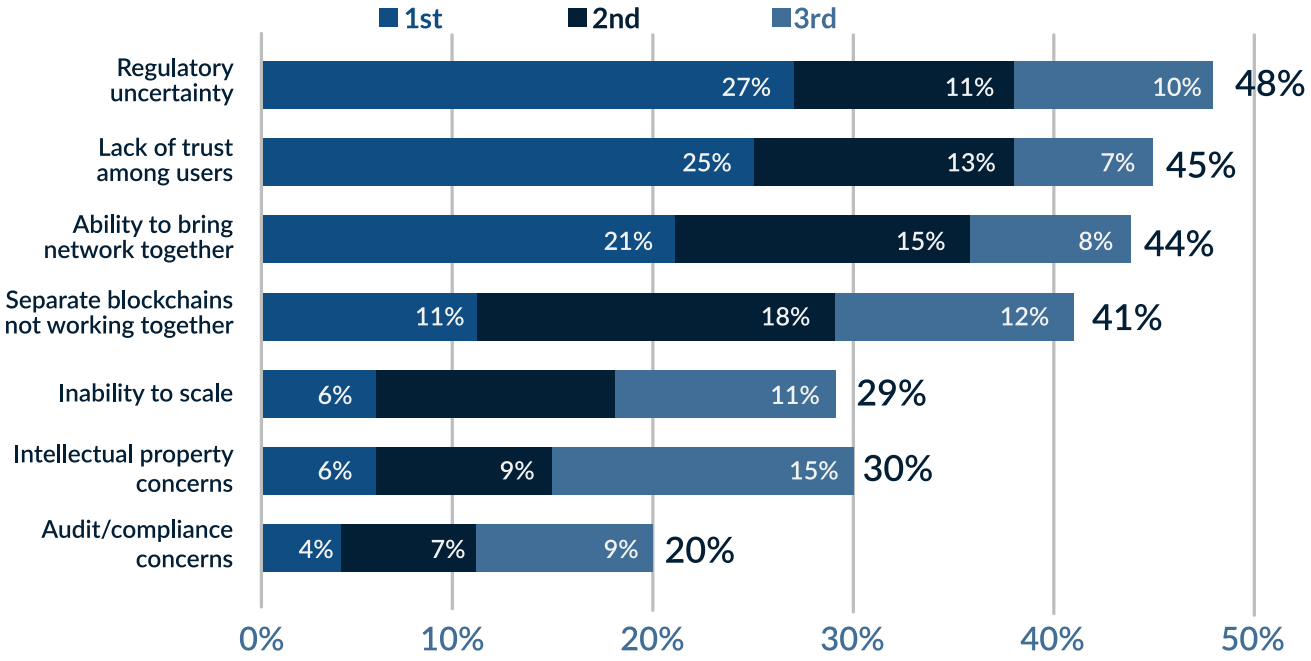
There is a lack of understanding of regulations with blockchain and cryptocurrencies. Many countries are still in the process of learning and discussing everything related to blockchain and especially the finance sector. This led to a situation where regulations in most of the countries are still unsettled.

Using blockchain technology benefits companies the most when they are collaborating and building the shared platform, but then they can't define rules without asking other participants to participate in creating them. If a company is creating a blockchain just for itself, it will face challenges related to internal buy-in, data harmonization, and scale. If more companies are collaborating to build a blockchain everything is becoming way more complex.

Blockchain is not a disruptive technology that can provide a low-cost solution to traditional business models but a foundational technology that will take a while to blend into our economic and social infrastructure. The adoption rate will be slow and steady as technological and technological and institutional change gain momentum.

The biggest barriers to blockchain adoption

Percentage of respondents ranking top three barriers to blockchain adoption



SOURCE: PWC STUDY[14]

[14] *https://www.pwc.com/gx/en/industries/technology/blockchain/blockchain-in-business.html*

JOB MARKET STATISTICS

Linkedin

Based on the Linkedin report[15] on job demand shows that Blockchain is at the top of the list when it comes to the top 10 hard skills in 2020. An interesting fact is that this was the first time Linkedin made it to the list and immediately took first place. The expectations and promise of blockchain is enormous, and the world's expectations are high. While some people are skeptical about standardization, scalability, and high energy usage, others see it as a secure, decentralized, transparent, and cost-efficient way to track all kinds of transactions. Some of the biggest companies like IBM, Oracle, JPMorgan Chase, Microsoft, Amazon, and American Express, are using blockchain to their advantage and we can see it in various industries as well. It's used from finance to healthcare, from farming to food safety, from entertainment, shipping, and gaming to the travel industry.

The most emerging job of 2020 according to the LinkedIn Job Report 2020[16] is blockchain developer with an increase of 33x. An interesting fact is that Linkedin didn't mention any hard skills in particular which are highly connected to this role. This report shows that soft skills are evolving gradually over the years, while the hard skills are transformed drastically as technology evolves. Hard skills are pretty much individual ability to solve a particular problem, while soft skills will define the approach for solving the problem. Soft skills are particularly connected to collaboration, problem-solving, decision making, and adaptability. The statement about blockchain being a top skill in 2020 will have a huge impact on career prospects.

Devin Banerjee, a Senior Financial Services Editor at LinkedIn, plotted the correlation of new blockchain developer hires with the monthly price of bitcoin.

The data shows the high correlation between the price of BTC and the number of new hires, but as you can see the number of hires peaked with a little delay in comparison with the BTC price. Despite the decrease in price and high volatility demand for blockchain talent and interest in crypto space has remained strong.

[15] *https://101blockchains.com/blockchain-is-a-top-skill/*
[16] *The Top Skills In Demand For 2020—And How to Learn Them*

SOURCE: DEVIN BANERJEE, LINKEDIN[17]

Google Trends

Google Trends Data shows that the period when most people looked for "Blockchain Jobs" was in October 2018 which is 8 months after the Bitcoin peaked in value and afterward we can see a slow decline with the expected slow growth moving forward. This shows that the market is maturing and that careers in this market moved beyond the stage of just being hype. The number of companies using BLockchain technology and smart contracts continues to grow, and now employers need to work on attracting talents and differentiating themselves as a result of increased demand with a limited supply.

Even though the United States being the most popular for vacancies, Google trends show that the most searches for "Blockchain jobs" come from St. Helena, an island in the South Atlantic Ocean, by far. The other areas are either known as tech-savvy countries or they have a keen interest in the Blockchain.

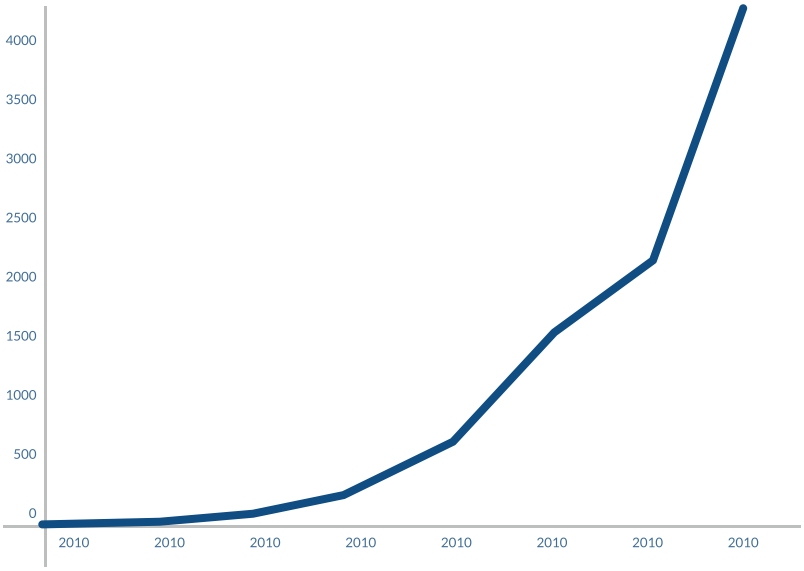
SOURCE: GOOGLE TRENDS[18]

[17] *https://www.linkedin.com/posts/devinbanerjee_blockchain-bitcoin-linkedinfinance-activity*
[18] *https://trends.google.com/trends/explore?date=today%205-y&q=Blockchain%20Jobs*

1	St. Helena	100
2	Ireland	40
3	India	34
4	United Arab Emirates	31
4	Pakistan	31

SOURCE: GOOGLE TRENDS[19]

Upwork



On the biggest freelancing platform, UpWork, blockchain skills are rated in the first place in fastest-growing skills of 2020 with an increase of 6000%.

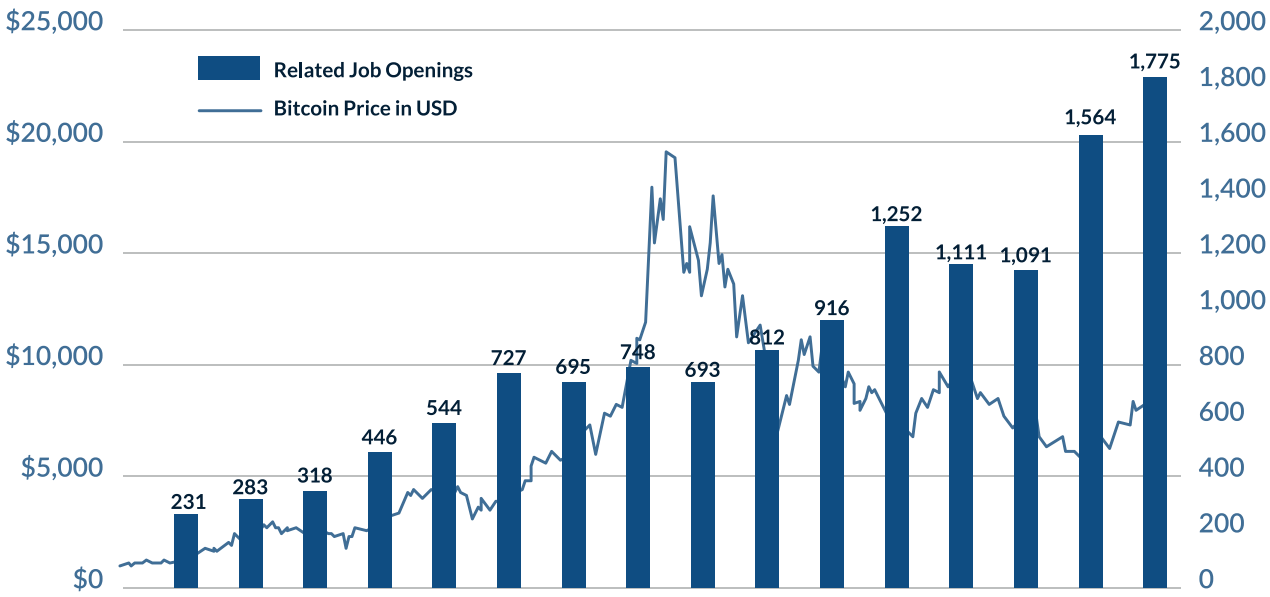
SOURCE: BLOCKCHAINJOBS.COM [21]

[19] *https://trends.google.com/trends/explore?q=Blockchain%20Jobs*
[20] *https://www.upwork.com/press/releases/q1-2018-skills-index*
[21] *Blockchain development is now the hottest skill, growing more than 6,000% since this time last year*

Others

Glassdoor study[22] from 2018 shows 1,775 unique blockchain and crypto jobs in the United States, while in August 2017 there were 446 jobs of this type which is a 300% increase.

BITCOIN JOB GROWTH OUTPACING CRYPTOCURRENCIES PRICES



SOURCE: GLASSDOOR[23]

Indeed.com, the popular United Stated job platform, found that "cryptocurrency" searchers topped out at 46 searches per million, and "bitcoin" just a little behind with 39 searches per million searches.[24]

One of the largest recruiting company called "Hired" released a report[25] which is showing that the increase in global demand for blockchain developers is up by 517 percent year-over-year. Their average salary is between $150,000 and $175,000 on average.

According to the report from Electric Capital,[26] the number of full-time developers increased by 13% in 2019, and Smart Contracts, Infrastructure, and DeFi ecosystems continue to grow even further.
IBM, one of the biggest IT companies, said that they are concerned with the lack of top blockchain talent, calling it a "significant inhibitor" to distributed ledger technology adoption. [27]

Even NASA announced[28] that they are looking for IT data scientists for its Jet Propulsion Laboratory research and development facility in California with experience in cryptocurrency and blockchain.

[22] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[23] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[24] *https://www.bitcoinegoldrush.com/interest-in-bitcoin-and-cryptocurrency-jobs-peaked-in-december-2017/*
[25] *Global Demand for Blockchain Engineers Up 517 Percent in a Year, Says Hired*
[26] *https://medium.com/electric-capital/electric-capital-developer-report-h1-2019-7d836d68fecb*
[27] *https://finance.yahoo.com/news/blockchain-most-demand-employment-skill-200027867.html*
[28] *https://iscjobs.com/blockchain-tops-the-list-of-most-in-demand-tech-skills-for-2020/*

GEOGRAPHICS OF BLOCKCHAIN

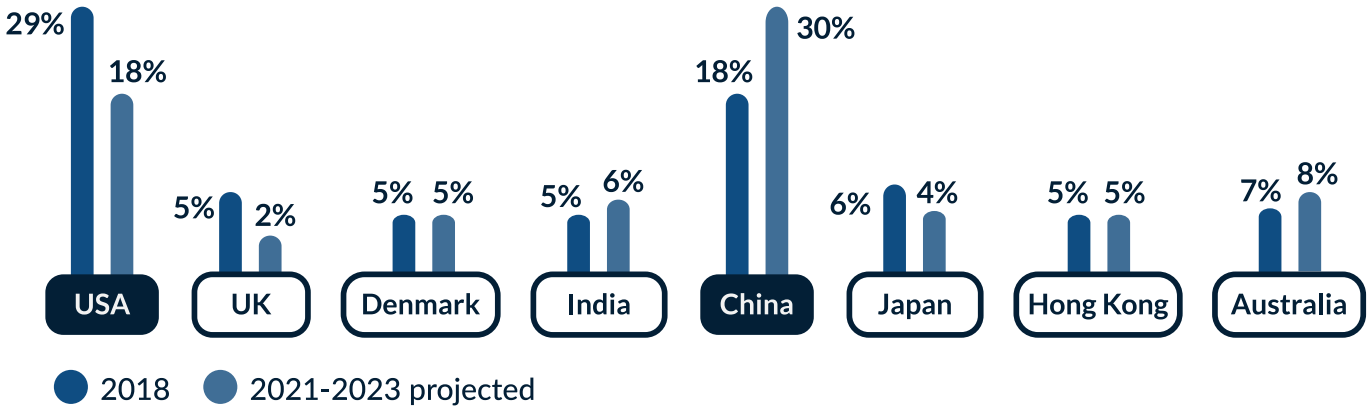
SOURCE: TOTALPROCESSING [32]

One of the reasons that salaries in the blockchain space are pretty high is the location of job openings. As it's often expected in the tech world, New York City and San Francisco top the list of American cities with blockchain job openings.[29] London and Berlin in the European market, Singapore and Hong Kong in the Asia market, and Buenos Aires in Latin America[30] climb the top of the worldwide list for blockchain job openings. Since 2019 there is also an increase in crypto and blockchain job opportunities in Africa.[31]

Despite the benefits of blockchain technology, mass adoption can take a while. Looking at the image it can be seen how fast each country is adopting the new technology and the percentage of the population is using crypto.

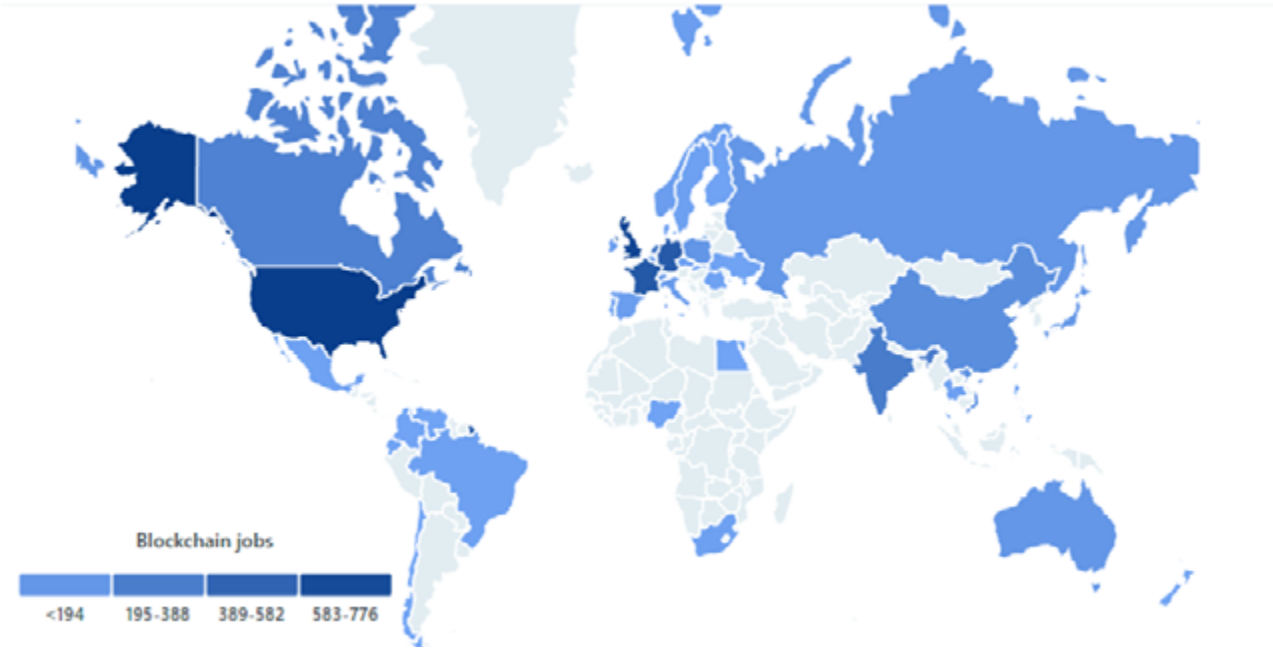
According to the Glassdoor report,[33] the United States is the leading country when it comes to the amount of blockchain-related jobs having about half, or 2,616, of a total of 5,711 blockchain jobs, followed by the United Kingdom, with 1,015 blockchain-related job ads. In third place is India with 257 blockchain-related jobs. The worldwide yearly growth in job increase on Glassdoor is around 300%. Even though the volatility of bitcoin and altcoins is pretty high the demand for the workforce remains essentially unaffected. Employers are valuing knowledgeable individuals and they are ready to pay high starting salaries for those who are more experienced and capable of providing results.

[29] *The-top-15-cities-for-blockchain-technology-jobs-in-america/?sh=662cee9e4ac5*
[30] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[31] *https://www.weforum.org/agenda/2017/04/these-are-the-22-best-cities-in-the-world-for-tech*
[32] *https://hub.totalprocessing.com/storage/media/2019-06/1559919908-UAITuwF2Ee-j4208v0DZwPRv58Wcm2DY5LaqL3hqj0.jpg*
[33] *https://indianblockchaininstitute.com/blockchain-job-opportunities/*



SOURCE: PWC STUDY[34]

According to Thinknum study,[35] the country with the most blockchain jobs in the US followed by France, Germany, and the UK. The crypto economy in India is growing rapidly as well. Due to the decentralized nature of blockchain, there are more and more jobs in remote positions.



SOURCE: CRYPTOSTATE[36]

[34] *https://www.pwc.com/gx/en/industries/technology/blockchain/blockchain-in-business.html#:~:text=In%20PwC's%202018%20survey%20of,some%20involvement%20with%20blockchain%20technology.&text=Gartner%20forecasts%20that%20blockchain%20will,US%20%243%20trillion%20by%202030.*

[35] *https://cryptoslate.com/big-business-bullish-on-crypto-careers/*

[36] *https://cryptoslate.com/big-business-bullish-on-crypto-careers/*

HOW MUCH DO EXPERTS MAKE?

According to the study done by an online learning company, Simplilearn[37], that combined multiple sources like Glassdoor, ZipRecruiter, The Blockchain Council, Business Insider, and Blockchain101 here are the average salaries in different countries. Be aware that these numbers can fluctuate based on location, company, demand, and other factors.

The amount of money which is earned by experts varies a lot based on their location.

Usually, the highest salaries are in the United States where the average annual income for a blockchain developer in the U.S. is $136,000 per year (the lowest threshold is $70,000 and the highest is $200,000).

In Asia, the average annual income for a blockchain developer is $87,500 per year (the lowest threshold is $60,000 and the highest is $120,000).

Blockchain developers in Europe earn around $73,300 per year (the lowest threshold is $55,000 and the highest is $91,000). For instance, in Great Britain, startups are paying new blockchain developers and juniors up to $50,000-60,000 a year, and large enterprises pay from $90k to $140k.

The remote blockchain developers earn around $123,750 (it ranges from $70,000 to $200,000).

Average annual salaries of blockchain developers by Simplilearn:

BLOCKCHAIN DEVELOPER SALARIES

India
₹460K

Canada
C$136,500

China
¥60k

Germany
$60k-150k

Singapore
S$95,865K

Switzerland
USD 180,000

UK
£68,000

US
$203,000

SOURCE: SIMPLILEARN[38]

[37] *https://www.simplilearn.com/salary-of-blockchain-developer-article*
[38] *https://www.simplilearn.com/salary-of-blockchain-developer-article*

Annual salary earned by a blockchain developer according to the data by Blockchain101[39]:

LOCATION	LOW END	HIGH END	AVG. SALARY
US	$ 80k	$ 180k	$ 127,5k
Asia	$ 100k	$ 150k	$ 125k
Remote	$ 100k	$ 200k	$ 145k

SOURCE: PEOPLEMATTERS[40]

When looking at the distribution of jobs worldwide most of them are based in major technological and financial hubs. London is leading with 16%, followed by Singapore, Toronto, Hong Kong, and Berlin.

RANK	CITY	# OF JOB OPENINGS	% SHARE
1	London	189	16%
2	Singapore	85	7%
3	Toronto	82	7%
4	Hong Kong	79	6%
5	Berlin	53	4%
	Other	730	60%
	Total	1,218	

SOURCE: GLASSDOOR[41]

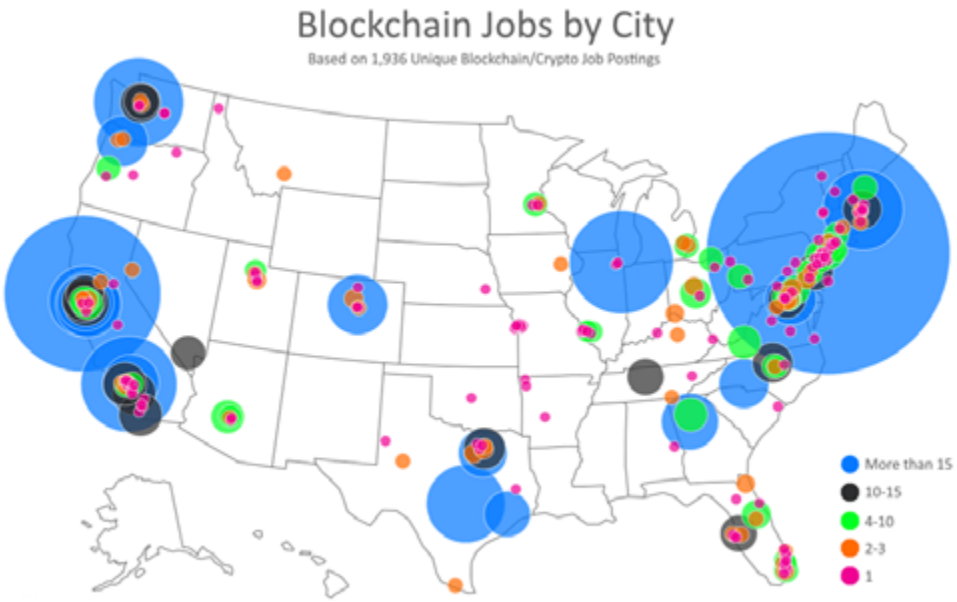
[39] *https://101blockchains.com/blockchain-developer-salary-on-the-rise/*
[40] *Article: What makes Blockchain top the list of most in-demand tech skills?*
[41] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*

United States

The average salary for blockchain developers in the United States is $154,550[42]. New York City, NY is the highest paying city in the United States for blockchain developers with a salary of $25,829 (16.7%) above the national average. The difference between the first and 10th city is very little, around 7%, so switching location to any of these 10 could be very beneficial for developers.

CITY	ANNUAL SALARY	HOURLY WAGE
New York City, NY	$180,380	$86.72
San Mateo, CA	$177,998	$85.58
Boston, MA	$172,271	$82.82
Juneau, AK	$172,251	$82.81
Berkeley, CA	$171,067	$82.24
Daly City, CA	$170,584	$82.01
Santa Monica, CA	$170,271	$81.86
Quincy, MA	$169,564	$81.52
Renton, WA	$169,475	$81.48
Richmond, CA	$167,977	$80.76

SOURCE: ZIPRECRUITER[43]



SOURCE: CRYPTOFUNDRESEARCH[44]

[42] https://www.ziprecruiter.com/Salaries/Blockchain-Developer-Salary
[43] https://www.ziprecruiter.com/Salaries/Blockchain-Developer-Salary
[44] https://cryptofundresearch.com/top-20-cities-blockchain-jobs-us/

There is a big disproportion in the share of blockchain jobs in different cities in the United States. New York City and San Francisco are leading with 24% and 21% of the share, followed by San Jose with 6%, Chicago with 4%, and Seattle with 4%, The top 5 cities are holding 59% of open blockchain-related jobs in the US.

RANK	CITY	# OF JOB OPENINGS	% SHARE
1	New York City, NY	421	24%
2	San Francisco, CA	381	21%
3	San Jose, CA	99	6%
4	Chicago, IL	84	5%
5	Seattle, WA	63	4%
6	Boston, MA	57	3%
7	Los Angeles, CA	57	3%
8	Washington, DC	57	3%
9	Austin, TX	38	2%
10	Raleigh, NC	32	2%
11	Philadelphia, PA	26	1%
12	Atlanta, GA	22	1%
13	Dallas, TX	20	1%
14	Denver, CO	20	1%
15	Charlotte, NC	18	1%
	Other	380	21%
	Total	1,775	

SOURCE: GLASSDOOR[45]

[45] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*

China

The Blockchain market is expanding fast in China by housing thousands of blockchain-based startups, government agencies, and tech firms that are adopting emerging technologies. Blockchain specialists earn 2.5x of national average salaries[46] in major cities in China.

China's President Xi Jinping backed blockchain technology at the end of 2019 with the goal of becoming the worldwide leader in blockchain development in the absence of competition. Last year the average monthly salary was $1,230. That number skyrocketed to $2,865 this year,[47] while people with three or more years of experience could earn $7,000 monthly on average.

In May this year China's Ministry of Human Resources and Social Security,[48] or MOHRSS, officially recognized blockchain jobs as a new occupation. Also, China is working towards the integration of its central bank digital currency, the digital yuan, across 20 different companies and banks.

According to KPMG's annual survey[49] Shanghai, Beijing, Hong Kong SAR, and Shenzhen are ranked among the Top 20 leading tech innovation hubs. All these cities are supported by a continuous supply of talent from universities while they are becoming worldwide leaders when it comes to the blockchain industry.

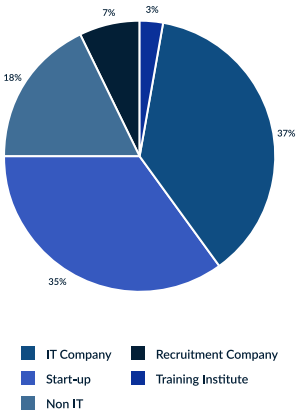
India

According to the Indeed report,[50] looking at the India market, Bengaluru is the leading city when it comes to blockchain-related job opportunities, followed by Gurgaon, Mumbai, Hyderabad, Pune, and Chennai. The presence of remote jobs is pretty high, as well.

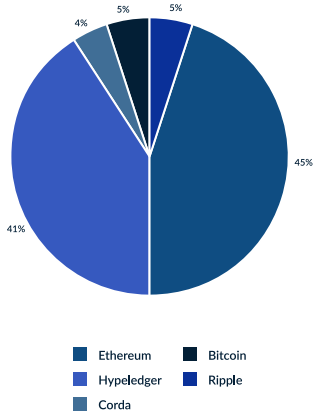
Blockchain-related companies are more open to remote positions with 37% of people working remotely while at others that number is around 15%.

[46] *https://cryptonews.com/news/blockchain-job-salaries-on-the-march-in-china-7322.htm*
[47] *Blockchain Salaries in China Are Exploding in Value as the Industry Expands*
[48] *https://cointelegraph.com/news/china-officially-recognizes-blockchain-jobs-as-new-occupation*
[49] *https://info.kpmg.us/content/dam/info/en/pdf/2020/tech-innovation-hubs.pdf*
[50] *https://in.indeed.com/jobs?q=blockchain&l=*

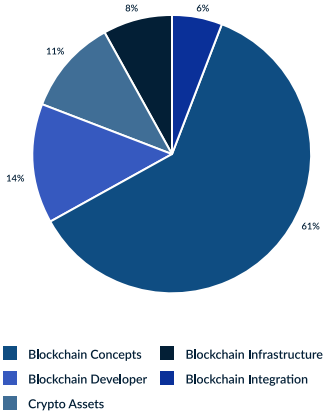
TYPES OF COMPANIES POSTING JOBS IN INDIA



BLOCKCHAIN PLATFORM WISE JOB IN INDIA



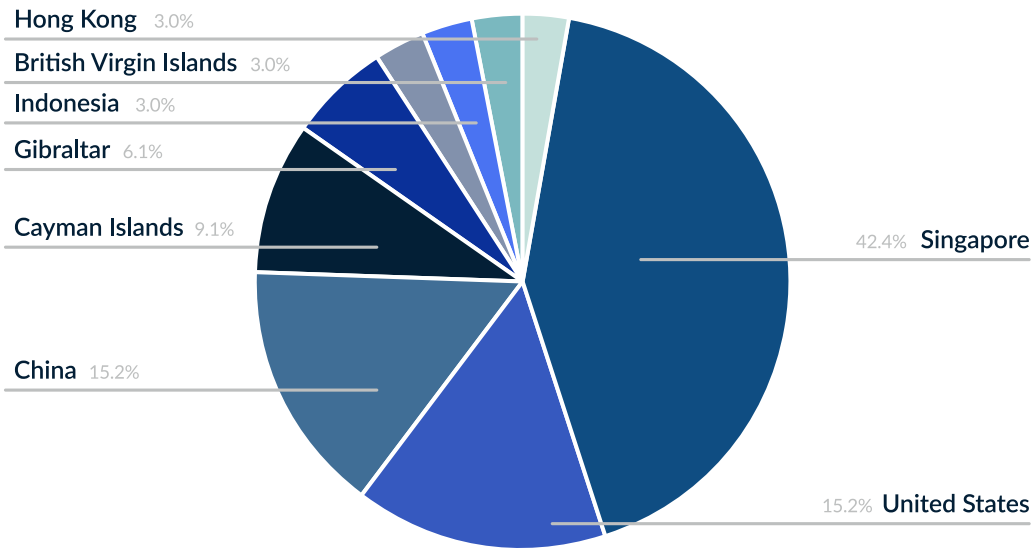
REQUIRED SKILLS IN INDIA



SOURCE: INDIAN BLOCKCHAIN INSTITUTE[51]

Singapore

Singapore established itself as a go-to jurisdiction for companies with utility tokens. Almost 38% of projects that launched a token sale in 2019 were based in Singapore since it is known as a business-friendly country with a progressive government. The 37 companies that launched token sales raised $161.6 million[52] and many of them were in the retail industry. Singapore benefited from United States regulatory constraints and gained additional market share and became a top hub for investments and industry employment. According to a survey from The Block,[53] 91% of firms believe that unclear regulations are the biggest obstacle for the United States in the blockchain space, and expect authorities to provide regulatory clarity in the close future.



SOURCE: THE BLOCK[54]

[51] *https://indianblockchaininstitute.com/blockchain-job-opportunities/*
[52] *Research report - employment trends in the digital asset industry commissioned by the Blockchain Association*
[53] *Deloitte's 2020 Global Blockchain Survey*
[54] *Research report - employment trends in the digital asset industry commissioned by the Blockchain Association*

MOST POPULAR JOB POSITIONS

If you are looking to pursue a career in the blockchain space you should be aware of the numerous career opportunities and positions in this emerging field.

When choosing the right job for themselves applicants should take into consideration their education, skills, and experience in a particular field. The demand for blockchain-related skills is increasing and it's always an advantage to look for a career in markets that are constantly growing and evolving.

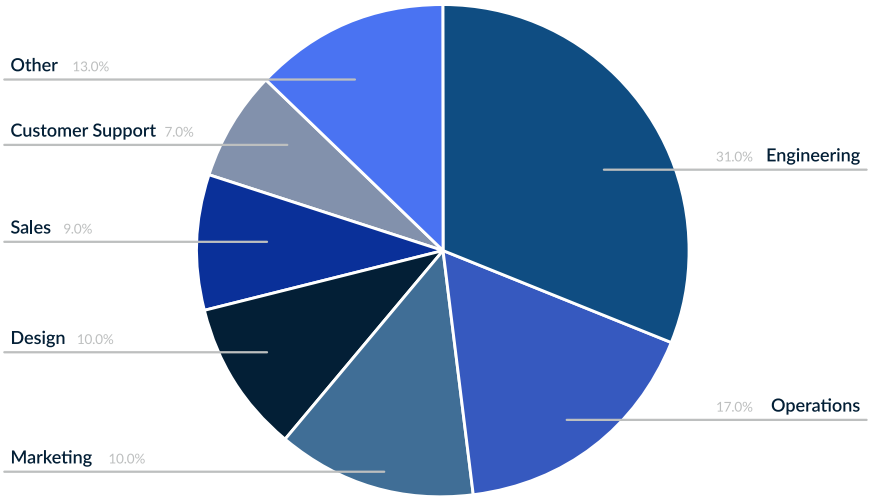
The expectations of expertise in the blockchain industry range from creative roles to business and more technical roles, but the demand for developers with coding skills and knowledge of solidity, token economics, database architecture, and other blockchain-specific specializations stands out.

The talent pool in the blockchain industry is pretty limited, so there is a huge demand for people working in this niche. Blockchain developer salaries are increasing as the demand continues to grow. According to the CNBC study,[55] blockchain developers can get a salary that's comparable with AI developers which is pretty high, but still, you don't need to be a developer to work in this space since over 40% of the jobs are non-technical.

Most people expect that they won't get hired without any previous experience in the blockchain industry but that's not the case, many employers are more interested in individuals prior work experience and passion for the blockchain, so do not self-reject and try to apply.

During 2019, there were 1135 jobs from 472 companies, and startups posted on Cryptocurrency Jobs.[56] Here is a breakdown across the roles: Engineering: 31%, Operations: 17%, Marketing: 13%, Design: 10%, Sales: 9%, Customer Support: 7%, Other: 13%

BLOCKCHAIN ROLES BREAKDOWN

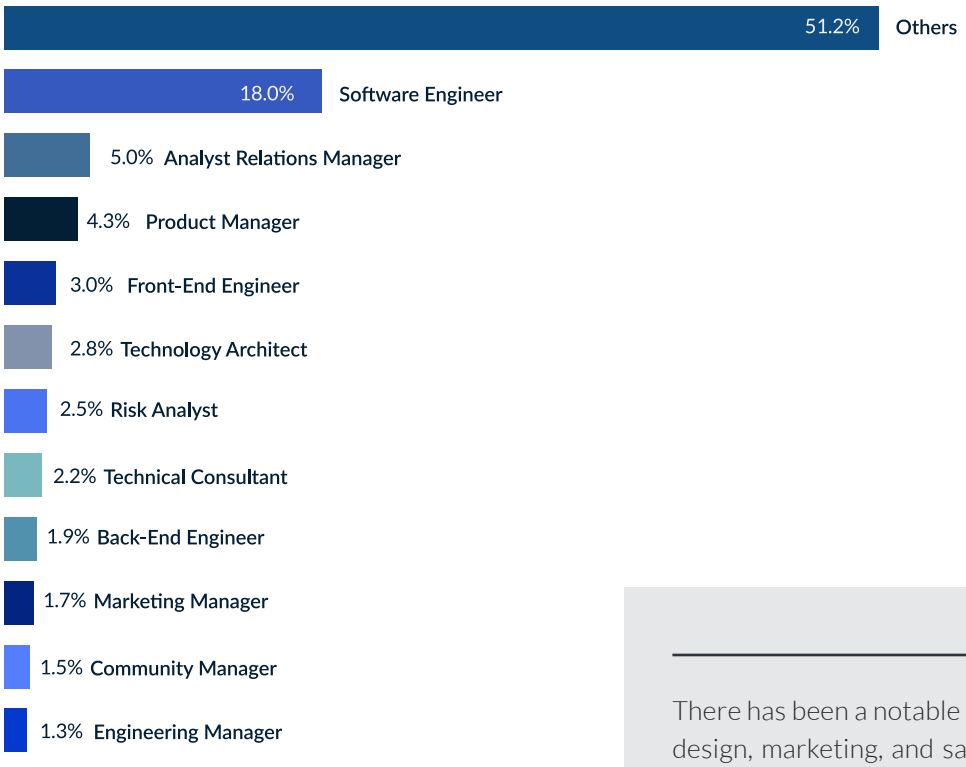


SOURCE: MEDIUM[57]

[55] *https://www.cnbc.com/2018/10/21/how-much-do-blockchain-engineers-make.html*
[56] *https://cryptocurrencyjobs.co/*
[57] *The State of the Blockchain and Cryptocurrency Job Market in 2019*

According to research from Glassdoor,[58] most of the highly desirable roles are technical and engineering roles. Software Engineer is the most searched role with around 19% of the total share. Recent research [59]shows that the demand for non-tech roles is growing. The expectations are that there is going to be more need for the more traditional finance roles as traders and investment analysts in the future as well.

GLASSDOOR ROLES BREAKDOWN



SOURCE: GLASSDOOR[60]

There has been a notable increase in blockchain design, marketing, and sales roles, with the re-focus on profitability and bringing products to the market. The demand for compliance, legal, and regulatory roles increased as well with the change of the regulatory environment in the crypto space worldwide.

Also, numerous studies[61] show that blockchain roles are more likely to be remote.

[58]*https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[59]*https://www.glassdoor.com/research/non-tech-roles-at-tech-companies/#*
[60]*https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[61]*https://consensys.net/blog/news/linkedin-blockchain-is-the-1-most-in-demand-skill-right-now/*

BLOCKCHAIN DEVELOPER

Blockchain Developer is the most popular job in the blockchain niche. Their main objective is to develop applications using blockchain technology. They need to have good technical skills with a desire to provide excellent services for their employers. Understanding blockchain architecture, cryptography, data structure, and web development are a must for anyone pursuing this route while having experience with, C++,.NET, python, XML is desirable.

Blockchain software developers and core blockchain developers are the two kinds of blockchain developers.

The average blockchain developer salary is

$100,979

per year.[62]

BLOCKCHAIN ARCHITECT

Blockchain Architect's objective is to assign, design, and connect the various Blockchain solution parts. This means cooperation with various departments as network administrators, IT Operations, developers, and UX designers. Skills that are expected from blockchain architects are React, CSS, HTML, React, Python, Generic SQL, and Node. Also, experience in DevOps, data science, and cryptography are crucial.

The average blockchain solution architect salary is

$81.129

per year.[63]

BLOCKCHAIN ADMINISTRATOR

Blockchain Administrator's primary duty is to create, develop, and maintain operations of blockchain infrastructure. Their goal is to leverage the capabilities of different blockchain teams and monitor the health of services and tools which are implemented. Employees pursuing this path should be experienced in using Linux, Unix, bitcoin protocol, and high-level programming languages. They should have an in-depth understanding and expertise in networking infrastructure, virtualization, and networking services and protocols.

The average blockchain administrator salary is

$83.200

per year.[64]

[62] *https://www.glassdoor.com/Salaries/blockchain-developer-salary-SRCH_KO0,20.htm*
[63] *https://www.glassdoor.com/Salaries/blockchain-architect-salary-SRCH_KO0,20.htm*
[64] *https://101blockchains.com/highest-paying-blockchain-jobs/*

BLOCKCHAIN PROJECT MANAGER

Blockchain Project Manager's goal is to develop a connection between the company and blockchain experts. They need to make sure to properly communicate and articulate the technical requirements to people in their company. Also, they need to have the skills of a regular project manager.

The average blockchain project manager salary is

$106,891

per year.[65]

BLOCKCHAIN UX DESIGNER

Blockchain UX Designer's objective is to build and develop a unique, simple, and user-friendly interface that will keep the users engaged. The individuals who are pursuing this career need to display creativity, technical knowledge, and knowledge about blockchain technology. Since they are cooperating with other departments good communication skills are also desirable.

The average blockchain UI/UX designer salary is

$107,500

per year.[66]

BLOCKCHAIN QUALITY ENGINEER

The Blockchain Quality Engineer role includes manual testing, automation frameworks, testing glitches, and bugs. If any problems are found the individual should report their concerns to the right department and ensure that the final product doesn't have any bugs. Applicants must have extensive knowledge of various blockchain platforms while being good problem solvers and have decent communication skills.

The average blockchain quality engineer salary is

107K – $ 117K

per year.[67]

BLOCKCHAIN CONSULTANT

Blockchain Consultant is one of the highest paying blockchain jobs. There are multiple areas of consulting but having a deep understanding of blockchain technologies is a must. The main responsibilities include devising strategies, forming solutions, and offering technical knowledge.

The average blockchain consultant salary is

$77.368

per year.[68]

[65] *https://101blockchains.com/highest-paying-blockchain-jobs/*
[66] *https://cryptocurrencyjobs.co/salaries/ui-ux-designer/*
[67] *https://101blockchains.com/highest-paying-blockchain-jobs/*
[68] *https://www.glassdoor.com/Salaries/blockchain-consultant-salary-SRCH_KO0,21.htm*

BLOCKCHAIN LEGAL CONSULTANT

Blockchain Legal Consultant's primary focus is to work on forming legal partnerships, advising firms on the structuring of cryptocurrency offerings, and overlooking the contracts. They need to be familiar with the financial regulations which are set by a specific country. Knowledge of smart contracts is a must.

The average blockchain legal consultant salary is

$100k to $190k

per year.[69]

BLOCKCHAIN ENGINEER

Blockchain Engineer's goal is to create an application that reflects the technological aspects of a company. The individual pursuing this career should constantly learn new things and be proficient with the economic aspect of blockchain engineering and understand concepts like supply and demand.

The average blockchain engineer salary is

$107,975

per year.[70]

BLOCKCHAIN ANALYST

Blockchain analysts are divided into two distinct types - business analysts and risk analysts. The job of business analysts is to develop effective business strategies, processes, and potential areas of improvement, while the risk analysts assess potential risks and offer effective solutions to counteract them comprehensive knowledge of blockchain and expertise in the related technical skills are a must if you intend to work as a blockchain analyst.

The average blockchain risk analyst salary is

$93,450

per year.[71]

[69] *https://101blockchains.com/highest-paying-blockchain-jobs/*
[70] *https://www.indeed.com/career/salaries/blockchain%20engineer?from=whatwhere*
[71] *https://101blockchains.com/highest-paying-blockchain-jobs/*

BLOCKCHAIN SECURITY MANAGER

Blockchain security manager's role is to develop unique, effective security strategies, implement security solutions for a frontend and backend software infrastructure, build comprehensive security frameworks, testing, and set up monitoring systems and processes. It's expected from the applicants to be experienced in cybersecurity and security architectural principles, cloud technology, and various automation tools.

The average blockchain security manager salary is

$136,625

per year.[72]

BLOCKCHAIN COMMUNITY MANAGER

The community manager's role is to create the content that will provide answers to their client's most asked questions. Their objective is to track and present engagement statistics over various platforms and develop strategies that will bring the best possible results. Even though a degree won't be crucial it's expected from applicants to have some decent education.

The average blockchain community manager salary is

$61,000

per year.[73]

JUNIOR DEVELOPERS

Junior Developers are usually interns, assistants, or entry-level developers. Tasks that are usually assigned to them are creating blockchain database application programming interfaces (API), user interface design (UI), debugging and repairing mobile and desktop apps, and front-end development.

According to ZipRecruiter,[74] the annual average salary for a junior blockchain developer in the US is $123,817. However, the top 6% of junior developers can earn up to $200K yearly.

The average blockchain Junior developer salary is

$123,817

per year.[74]

[72] *https://www.ziprecruiter.com/Salaries/Cyber-Security-Manager-Salary#:~:text=National%20Average,-%2439.90%20%2466%2Fhour&text=As%20of%20Dec%2030%2C%202020,%2Fweek%20or%20%2411%2C385%2Fmonth*

[73] *https://cryptocurrencyjobs.co/salaries/community-manager/#:~:text=The%20average%20base%20salary%20for%20a%20remote%20blockchain%20community%20manager,high%20base%20salary%20of%20%24120%2C000*

[74] *https://www.ziprecruiter.com/Salaries/Junior-Blockchain-Developer-Salary*

PAYMENTS BREAKDOWN

These numbers can vary a lot from source to source, but one of the most objective ones with job positions listed was on u.today:

POSITION	AVERAGE SALARY	WHO HIRES
Software engineer	$90,000-$145,000	Chronicled (San Francisco), Axuall (Cleveland), Blockstack (New York)
Tech architect	$100,000-$160,000	Amazon/AWS (Seattle and Los Angeles), Bank of America (Charlotte, North Carolina), State of Colorado (Denver)
Product manager	$85,000-$130,000	Mediaocean (New York), JP Morgan Chase (New York), Cynet Corp. (Springdale, Arkansas)
Risk analyst	$85,000-$105,000	Veem (Ottawa), Bank of America (Jacksonville, Florida), Electric Power Research Institute (Knoxville, Tennessee)
Analyst Relations Manager	$50,000-$125,000	IBM (New York), Accenture (Atlanta, Chicago, Washington, D.C.), R3 (San Francisco)
Front End Engineer	$70,000-$125,000	Gem (Los Angeles), Binance (Austin, Texas), Ford Motor Co. (Dearborn, Michigan)
Legal Counsel	$100,000-$190,000	Consensys (New York), BitGo (Palo Alto, California), Figure (San Francisco)
Business Analyst	$80,000-$105,000	IBM (Research Triangle Park, North Carolina), NuArca (Woburn, Massachusetts), Bittrex (Washington, D.C.)
Crypto Community Manager	$35,000-$95,000	Dolare (South Bend, Indiana), Zeus Protocol (San Francisco), Crowdcreate (Los Angeles)
UX/UI blockchain designer	$80,000-$140,000	

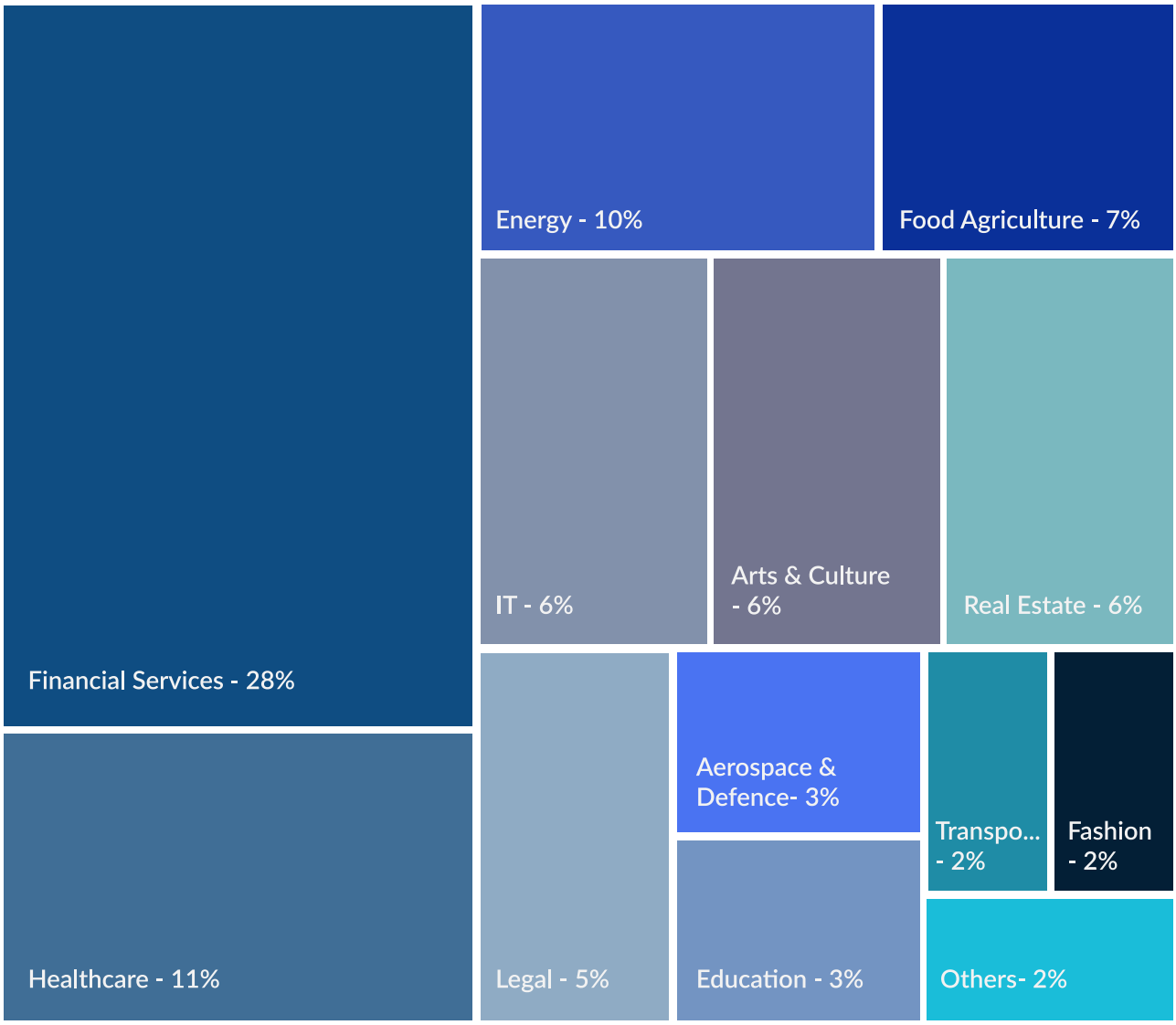
SOURCE: CONSENSYS[75]

[75] *https://consensys.net/blog/blockchain-development/the-blockchain-jobs-report-2019/*

BLOCKCHAIN APPLICATION
ACROSS VARIOUS SECTORS

Blockchain was initially built primarily for the finance sector to facilitate transactions.

Nowadays, blockchain technology has been deployed across all sectors, with five industries accounting for 67% of total blockchain startups.[76] While finance is still the leading sector with 28%, Healthcare, Energy, and Food/Agriculture are right behind it. Sectors like Real Estate, Legal, Arts, and Culture, are still lacking the same regulations across all countries worldwide for projects to take off.



SOURCE: LEADBLOCK PARTNERS[77]

[76] *Enterprise Blockchain 2020*
[77] *Enterprise Blockchain 2020*

FINANCE & BANKING

Having a 3rd party partner as a bank includes high transfer fees, bad exchange rates, and even some hidden costs. On top of that, the process is time-consuming and not 100% secure. The biggest advantage of blockchain is that it provides a peer-to-peer payment system with low fees and high security. In this way, blockchain eliminates the need for a third party and offers full transparency by recording all transactions in a public ledger

The main driver for the adoption of blockchain in the finance sector was an outdated infrastructure and pressing needs for cost rationalization. Many startups initially invested in better processes to enable cheaper and faster financial transactions with a higher security level, as well. Blockchain technologies are providing a solution for low and pressured margins across the financial industry both for retail and investment banking.

85% of asset managers expect real-time transactions and transparent logs of data for documentation and reporting purposes provided by blockchain technologies and disruption of the Transfer Agent value chain in the upcoming 10 years.

TOP EX-EMPLOYERS

J.P.Morgan
Goldman Sachs
UBS

TOP CUSTOMER TARGETS

Fidelity INVESTMENTS
BARCLAYS
Allianz
AXA

SOURCE: LEADBLOCK PARTNERS[78]

[78] *Enterprise Blockchain 2020*
[79] *https://twitter.com/transactivegrd?lang=en*

ENERGY MANAGEMENT

In the past, the energy management industry was highly centralized. In more developed countries to transact in energy companies must go through an established power holding company or National Grid or deal with resellers who previously purchased from big electricity companies.

Blockchain could eliminate the need for 3rd parties and some startups are already rethinking the traditional energy-exchange process. One of them is called Transactive Grid[79] and they are using ethereum technology to enable people to generate, buy, and sell energy to their neighbors in a decentralized way.

HEALTHCARE

One of the biggest problems in the healthcare industry is that drug development is a high cost, high length, and low success rate process. In clinical trials finding, acquiring, and retaining patients is a major challenge. Administration and regulations in different countries could vary and is another important hurdle. According to a study from United States Academia,[80] the success rate is only around 10%.

Another big problem is falsified medicines which are a result of a lack of transparency. Collaboration between major industry players was almost impossible due to the sensitive nature of data and data standards. Blockchain technology could facilitate cooperation while ensuring data is secure and kept private.

People's health data was stored in centrally located files that could be easily stolen or lost. Also, the time it takes to access the data when somebody asks for it is pretty slow and data is exposed during that time. Blockchain eliminates the need for a central authority and enables fast access to data. Also, the blocks are connected and distributed across the blockchain nodes, which makes it harder to corrupt the data.

TOP EX-EMPLOYERS	TOP CUSTOMER TARGETS
gsk GlaxoSmithKline, Roche, NOVARTIS	Johnson & Johnson, SANOFI, MERCK

SOURCE: LEADBLOCK PARTNERS[81]

[80] *https://pubmed.ncbi.nlm.nih.gov/29940695/*
[81] *Enterprise Blockchain 2020*

FOOD & AGRICULTURE

One of the biggest obstacles in the food production industry is trust between manufacturers and consumers and the reason for that is lack of transparency. Only 33% of consumers trust food brands and around 75% are saying that they will switch to food brands that are more transparent and provide more information[82]. 70% of the people are concerned about environmental impact as well. Blockchain can increase trust in these brands and improve transparency and accountability by design.

Farmers and growers are the key ingredients to producing quality food, but they are often left out and sustainable producers often struggle to differentiate themselves and increase prices. This pretty much disincentives them, but blockchain could solve this problem by transparency and that would drive consumer purchasing power towards sustainable products.

TOP EX-EMPLOYERS	TOP CUSTOMER TARGETS
MARS Tomorrow starts today, DANONE ONE PLANET. ONE HEALTH, Nestlé	Carrefour, Walmart

SOURCE: LEADBLOCK PARTNERS[83]

CYBERSECURITY

Cyberattacks were a significant threat to the public. Cybercrime costs are growing 15% per year, reaching $10.5 trillion annually by 2025, up from $3 trillion in 2015.

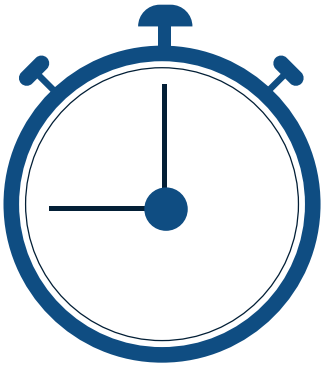
Blockchain is a decentralized system that provides a safe and transparent way of recording all previous transactions, without compromising the owner's private information. Another benefit of blockchain technology is that it encrypts all the data using a cryptographic algorithm, so pretty much larger attacks are impossible to execute.

The third advantage is that blockchain transactions are executed peer-to-peer so malicious attacks can be quickly identified and data cannot be altered. A company called Guardtime[84] is a good example of the previously mentioned implementation.

[82] *THE TRANSPARENCY IMPERATIVE*
[83] *Enterprise Blockchain 2020*
[84] *https://techcrunch.com/2016/12/05/how-blockchain-can-help-fight-cyberattacks/*

GLOBAL CYBERCRIME DAMAGE COSTS:

$6 Trillion USD a year*
$500 Billion a month
$115.4 Billion a week
$16.4 Billion a day
$684.9 Million an hour
$11.4 Million a minute
$190.000 a second



ALL FIGURES ARE PREDICTED BY 2021

SOURCE: CYBERSECURITYVENTURES[85]

SUPPLY CHAIN MANAGEMENT

Supply chain management's biggest obstacle was a lack of transparency. The result of this was bad communication and coordination between various vendors which led to lower reliability and service redundancy.

Blockchain offers tracking of a product by facilitating traceability across the entire Supply chain. It offers permanent transparency and validation of transactions, so pretty much everything can be tracked from date and time to history of where the goods have been. For example, if you create an order for some specific food and you are not satisfied with it, the owner could go back through history and find where in the supply chain the order went wrong to displease you. He can go from farmer to the producer, to the distributor, to the retailer, then to the person who created an order.

[85] *https://cybersecurityventures.com/cybercrime-damages-6-trillion-by-2021/*

GOVERNMENT

Currently, American trust in government is at its all-time low and only 18% of Americans trust the government[86] to do what is right most of the time.

Blockchain could help with the improvement of transparency through decentralization allowing participants to verify the data. Governments in some European countries are implementing blockchain-based land registries that help citizens to quickly resolve property disputes or prevent them altogether.

Personal data of 142 million Americans were exposed in the 2017 Equifax database breach.[87]

Blockchain technologies improve network security by reducing single-point-of-failure risk and can make attempting a breach prohibitively harder or even impossible. Government agencies are helping with the increase of the blockchain application in cybersecurity. Department of Homeland Security is funding startups in the government cybersecurity field.

Source: Photo by Harold Mendoza on Unsplash

Challenges of reconciling intragovernmental transfers are expensive and time-consuming and there are trillions of dollars in unreconciled funds in the federal budget[88] at any given moment. Blockchain accounting and payment systems could provide a permanent audit trail and facilitate faster reconciliation.

A smart city uses various technologies and data to ensure efficient and optimal utilization of available resources. IoT, cloud computing in combination with blockchain could deliver innovative solutions to citizens and local municipalities. It can provide

[86] *https://www.pewresearch.org/politics/2019/04/11/public-trust-in-government-1958-2019/*
[87] *http://www.chicagotribune.com/business/national/ct-equifax-data-breach-20170907-story.html*
[88] *https://www.gao.gov/assets/690/682081.pdf*

A smart city uses information technology and data to integrate and manage physical, social, and business infrastructures to streamline services to its inhabitants while ensuring efficient and optimal utilization of available resources. In combination with technologies, IoT, cloud computing, and blockchain technology, governments can deliver innovative services and solutions to the citizens and local municipalities. It can provide a secure infrastructure that would allow all smart city services and functions to operate on a higher level. ConsenSys has worked toward realizing smart city initiatives in Dubai and Zug.

Traditional voting is a time-consuming process with a lot of rigged votes included. Online voting was possible but because a central authority is used there was a possibility of fraud votes, so security is an issue as in other industries.

Blockchain is solving all the issues due to the ability of individuals to vote without showing their identity publicly. The precision of counting would increase as well due to the ability to automate the calculations and each ID would be able to submit only one vote. Also, once the vote is added to the ledger there is no possibility for fraud since it cannot be erased.

There are already a few great startup solutions for this. One of them is called MiVote, where voters can cast their votes on their smartphones and the records are stored on the blockchain. Dubai, for example, wants to transfer all the governmental functions to blockchain due to transparency and security.

The government sector is one of the sectors which is gonna benefit the most from the adoption and development of blockchain technologies due to its nature and widespread possibilities. It's present, but not limited to patent and trademark, procurement, social program payments, land titling, marriage certificates, all types of registration, government-issued Identification.

REAL ESTATE

In the real estate industry, there are problems with transparency, copious amounts of paperwork, possible fraud, and errors in public records that occur during buying and selling properties.

Blockchain could help with recording, tracking, transferring land titles, property deeds, liens, it can help to ensure that all documents are accurate and verifiable. Some startups like Propy[89] are allowing buyers to secure home buying through their blockchain-based smart contract platform.

All documents are signed and securely stored both online, while deeds and other contracts are recorded both online and on paper.

[89] *https://propy.com/browse/*

HUMAN RESOURCES

There are a number of issues in the HR industry that could be resolved by the application of blockchain technologies.

Talent sourcing was a slow, labor-intensive, and expensive process. With blockchain, there is a possibility of accurately assessing the education, skills, and performance of potential recruit that will lead to better roles allocation

Boosting productivity by automating payroll and VAT while reducing time spent on administration. This will especially benefit small and medium-sized companies since they will be able to invest this time in growing their business.

Managing cross-border payments and employee mobility. Many multinational businesses may create their corporate currencies which will allow them to transfer value across their business globally in real-time without additional costs from third parties.

Cybersecurity and data protection that blockchain provides will again greatly benefit small and medium-sized businesses. Lack of transparency in data, cybersecurity, and fraud threats are further challenges that blockchain can help to address in the future.

ACCOUNTING

Accounting is highly connected to the measurement and communication of financial information and the analysis of this information or planning how to benefit from the right allocation of these resources. Blockchain has the potential to reduce cost, increase efficiency, and provide absolute certainty over the ownership and history of assets.

Blockchain could bring more reliability into the process of measuring the value of data that a company holds, which was previously almost impossible to do. In a long term, the accountants who are just sticking to the role could be threatened by adopting blockchain technologies but the ones who are willing to learn will have more time to spend on judgemental areas and consultations, for example, due diligence in mergers and acquisitions.

Accountants are great at keeping records, critical thinking, application of complex rules, business logic, and standards-setting. This gives them a great opportunity to shape and influence how the blockchain will be used when it comes to accounting. Blockchain development, standardization, and optimization will take some time. Currently, most of the blockchain applications and start-ups in this niche are at the research or proof of concept stage and they still have a big challenge of delivering regulations and standards.

Data analytics and machine learning combined with blockchain development will lead to an increase in efficiency and value of the accounting. Many processes will be optimized and we will see a reduction in the need for reconciliation and dispute management and increased certainty around rights and obligations. Due to that, the skills that are required to be an accountant will change. Some areas as reconciliations and provenance assurance will be reduced while advising on blockchain adoption or assessing blockchain impact on their client's business will be increased. They will need to act as a bridge and connection between business stakeholders.

EDUCATION AND ACADEMIA

Looking at primary, secondary schooling, and universities verifying academic credentials remains a manual process with a lot of frauds and claims of unearned educational credits.

Blockchain technologies could streamline verification procedures and help with resolving the mentioned issues. Sony Global Education and IBM already developed an educational platform[90] to secure and share student records based on this technology. Blockchain could help with making learning materials more accessible, simplifying administrative tasks, and improving communication and data sharing between parents.

[90] *Sony and Sony Global Education Develop a New System to Manage Students' Learning Data, Built on IBM Blockchain*

LARGEST EMPLOYERS

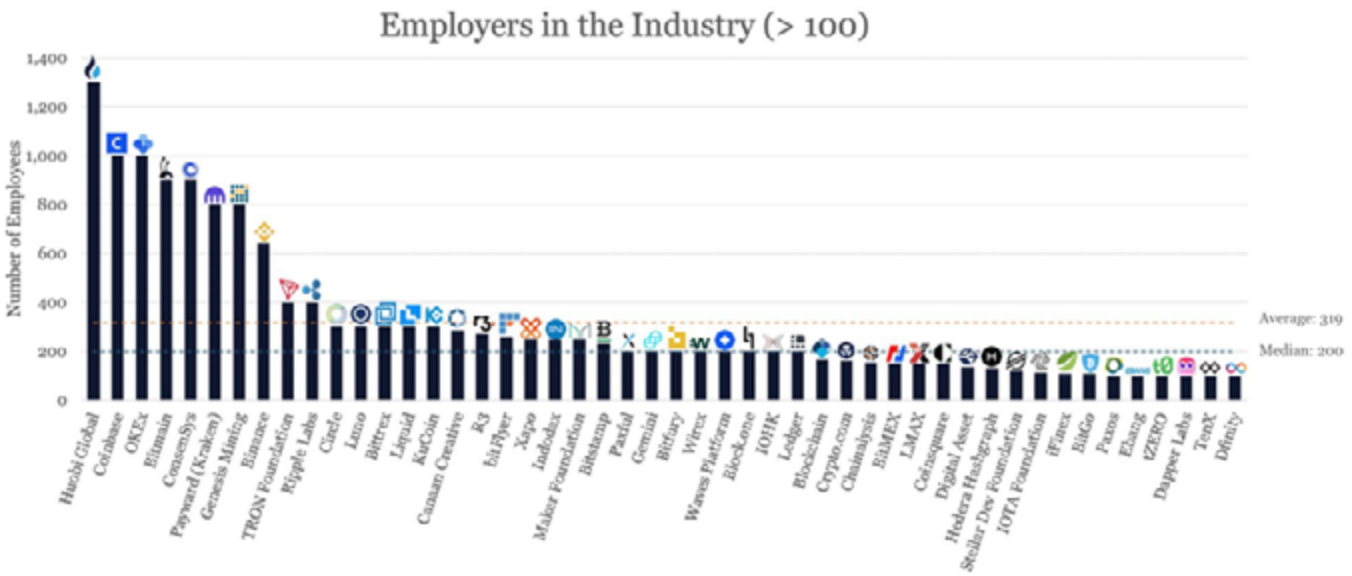
TOP 5

Deloitte, IBM, Accenture, Cisco, and Collins aerospace

The top 5 biggest employers when it comes to blockchain jobs, respectively, are Deloitte, IBM, Accenture, Cisco, and Collins aerospace, "Big Four" firm Ernst & Young comes at 6th place, Coinbase comes at 7th, Overstock.com at 8th, Ripple at 9th, Verizon, an only online mobile company, at 10th, Circle at 11th, Kraken at 12th, ConsenSys on 13th, JPMorgan Chase, which is developing its own stablecoin, and crypto-company-friendly Signature Bank tail in at 14th and 15th.[91]

Facebook and Square are also trying to make blockchain tech hiring inroads.[92] Twitter and Square CEO announced that their new currency is looking to hire some blockchain engineers and a designer. On the Facebook Careers Page,[93] you could also find that they are hiring for a position "Lead Commercial Counsel, Blockchain", and few smart contracts experts from the Chainspace project

Growth in the blockchain industry comes mainly from exchanges, development, and mining firms which account for 85% of professionals employed.[94] Crypto exchanges are the largest employer[95] with 42% followed by mining hardware companies, with 10%. Looking at companies with 100 or more employees 46% of them are employed by digital asset exchanges. There are currently 48 companies with 100 or more employees.[96]



SOURCE: TWITTER @DOGETOSHI[98]

The biggest employer is Huobi Global, an Asian exchange, followed by OKEx and Coinbase.[97] Around 67% of these employers are based outside the United States, while Coinbase being the largest company by the number of employees in the United States, followed by ConsenSys, the Ethereum venture studio, and development firm.

[91] *https://in.news.yahoo.com/crypto-blockchain-jobs-increased-26-151019229.html*
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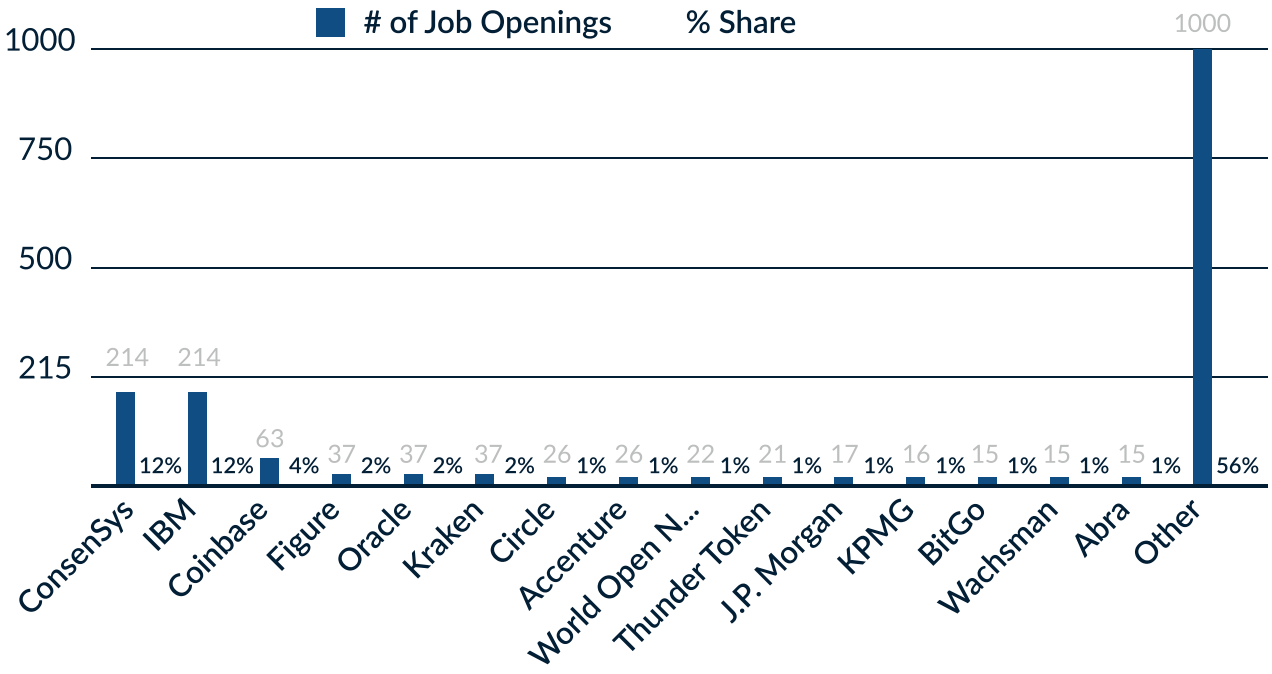
[97] *https://www.supercryptonews.com/huobi-global-digital-asset-exchange/*
[98] *https://twitter.com/Dogetoshi/status/1220379160121683969?ref_src=twsrc%5Etfw*

Many of the startups and bigger blockchain companies are cooperating with universities and various edtech companies of upskilling individuals for future jobs in the crypto space. For example, CoinDCX launched DCX Learn,[99] which is an online learning platform where Indians can get access to any educational resources related to the crypto space.

Few of the already largest employers in the crypto and blockchain industry are startups who are looking to expand. ConsenSys has over 200 new job positions,[100] while Coinbase, Figure, and Kraken are looking to expand as well.

IBM and large consulting firms like Accenture and KPMG are also hiring primary roles that could guide them through the application of new blockchain technologies.

TOP EMPLOYERS FOR BLOCKCHAIN JOBS



SOURCE: GLASSDOOR[101]

According to AngelList,[102] there are at least 1,500 startups that raised over $3.7 billion from ICOs in 2019 and many of them are employing aggressively in the US. The ones which are hiring the most were IBM, Cisco, and Accenture with almost 1,000 vacancies.

[99] *https://yourstory.com/2020/06/bain-backed-coindcx-launches-dcx-learn-crypto-education*
[100] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[101] *https://www.glassdoor.com/research/rise-in-bitcoin-jobs/#*
[102] *https://coinup24.com/blockchain-and-crypto-jobs-market-2018-vs-2019-by-the-numbers/*

COMPANY	VACANCIES	COMPANY	VACANCIES
IBM	428	Overstock	52
Cisco	288	Consensys	48
Accenture	213	Deloitte	47
Oracle	144	Kraken	47
PwC	140	CGI	45
Ernst & Young	132	KPMG	45
Coinbase	91	Air France	40
Binance	73	Facebook	40
SAP	66	Luno	38
Collins Aerospace	65	Verizon	35
Latoken	64	Capital One	34
Ripple	62	Chain Analysis	33
Block.one LLC	59	Visa	31
Blockchain	53	Axiom Zen	27
Amazon	53	BitFury	20

SOURCE: COINTELEGRAPH[103]

[103] *https://cointelegraph.com/news/blockchain-and-crypto-jobs-market-2018-vs-2019-by-the-numbers*

POSITIONS FROM TOP COMPANIES

IBM needs a blockchain software engineer[104] who can take care of the company's issues with frameworks and integrations. IBM requirements for this role is that applicants have a minimum of 2 years of experience with cloud app creating using Node, js, web apps, and REST tools, working with Agile, knowledge of DevOps tools, and ability to solve problems and interact with stakeholders wise.

IBM is looking to pay $68k – $106k annually for this position.

Microsoft is seeking a blockchain principal program manager[105] who is experienced in how clients utilize de-centralized ledger technologies, as well as other services (storage, database, computation, and networking) in Azure for creating their applications. Their requirements are a BS degree, 10 or more years of experience in software development or management, 6 or more years developing and running services, and good technical and communication skills.

Microsoft is willing to pay $91k – $131k annually for such specialists.

Visa is looking for versatile blockchain experts[106] and specialists to integrate a blockchain framework into their system of international banking. Their expectations from individuals that apply for this role is an experience in the finance sector and understanding of these platforms, BS in Computer Science, over 2 years of developing distributed software, knowledge of various technologies as Linux, Open source, C++ or Java, customer server applications and overall industry experience of 6 years.

Visa is interested in paying $110k – $140k for experts in this field.

[104] *https://blockgeeks.com/blockchain-developer-salary/*
[105] *https://u.today/guides/blockchain/top-12-highest-paying-blockchain-jobs-in-2019*
[106] *https://blockgeeks.com/blockchain-developer-salary/*

Source: Photo by StockSnap on Pixabay

FUTURE OF BLOCKCHAIN EMPLOYMENTS

If you are looking for a job opportunity in the blockchain space the best sites to visit are AngelList, Blockchainjobz, Blocktribe, Crypto Jobs List, Indeed, Joblift, Linkedin, and Upwork.

The recent covid pandemic was a huge driver for digital transformation, and blockchain proved as a great tool to create highly secure, transparent, and effective end-to-end solutions. This led to a higher demand for blockchain technology expertise and it will grow even further in the future. Enterprises are shifting towards digital platforms as they understand the benefits that blockchain provides.

After reading this article about the benefits of employment in the blockchain industry it wouldn't be odd if you are pondering a career change. If you are looking to become a blockchain developer, pivot your current career, or upskill, this emerging technology is a great choice. Blockchain technologies will be a part of pretty much every industry in the future and smart and successful professionals are always trying to stay up to date with current trends and technologies.

With the maturity and evolution of the blockchain, besides bigger demand for the currently existing roles, there will be openings for new job profiles, as well. Some roles like fund managers, wallet engineers, community managers, and crypto economists will increase in demand as well.

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Who we are:

The Blockchain Academy LLC. is a global firm that has training as its sole focus. The Blockchain Academy's commitment is to create and deliver highly engaging training for blockchain technology.

The Blockchain Academy, Inc. is one of the first learning organizations to provide a truly dynamic educational training platform. As an organization that roots were founded in the classroom delivery, we have amassed years of experience in delivering training both live and digitally.

Our instructors, consultants, and management team have a wealth of financial knowledge and experience gained from over thirty years of working experience. Our instructors and education group have designed, developed and delivered training programs globally to many of these leading institutions and our software development team consists of some highly gifted programmers, designers, and educators, who understand it's about the end-user learning experience and the business goals.

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