

## THE RETROSPECTIVE OF THE SILICON VALLEY PHENOMENON

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The retrospective of the Silicon Valley is under the consideration in the article. The historical factors as well as the process of professional networks formation were presented and analyzed for the purpose of realization success of the place and prediction of its future development.

Silicon Valley is a place where almost every startup and programmer dreams of working. It is not marked on the map, but it is one of the largest centers of development of world innovative technologies. "They built innovative companies that became huge technology corporations, all because where everyone saw risk, they saw opportunities," venture capitalist Tom Perkins said of the Valley's pioneers.

The world's leading center for high-tech companies, located in southwestern California. The largest cities in Silicon Valley are San Francisco, San Jose, San Manteo, Polo Alto, Fremont, Santa Cruz, Scotts Valley, Livermore and Pleasanton. Stanford University has become a kind of intellectual center of the Valley, which annually accepts about 7,000 students and 8,000 graduate students.

Now there are leading manufacturers of microprocessors, software, mobile devices, biotechnology and more. And it all started in the middle of the 19<sup>th</sup> century, when the first research laboratories for shipbuilding, both military and commercial, were built on this territory. It should be added that the US Navy contributed to the formation of the Valley: in 1933, the Navy purchased Moffetfield, a plot of land in Sunnyvale to service military airships. Subsequently, the area became the center of the aerospace industry. During World War II, radars and artillery designs were produced here. One of the fathers of Silicon Valley is considered to be physicist William Shockley, who invented Bell Labs and his colleagues invented the first germanium bipolar transistor. For this, researchers in 1956 received the Nobel Prize in Physics. Shockley later moved to California, where he founded Shockley Semiconductor Laboratory in Mountain View. The main goal of the new company was to develop methods for using silicon in the manufacture of transistors (which replaced the more expensive and less resistant to high temperatures semiconductor material, germanium). Shockley brought together a team of 8 talented young researchers who, after the death of their mentor, continued the business and established the successful production of silicon transistors. These employees went down in history as the Treacherous Eight.

The name *Silicon Valley* was first used in 1971 in his report on the development of the semiconductor industry by journalist Don Hefler. In 1972, financiers Eugene Kleiner and Tom Perkins set up the first venture company in Silicon Valley for young entrepreneurs. After that, inventors and scientists from around the world began to seek happiness in the Valley. Let's add that ordinary residents, who had a piece of land in southwestern California, immediately became billionaires after the sale of land.

The retrospective of the Silicon Valley phenomenon shows its quite long history of successful technology development. The cooperation of young scientists, manufacturers and investors make the uniqueness of the place, which is going to keep the positions of the innovations leader in the foreseeable future.

### References

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