

Financial
Leader DNB
Partners with
Udacity to
Power Digital
Transformation
Initiative

**CASE STUDY** 



Norway's largest financial service provider transforms into "a technology company with a banking license" as Udacity provides the essential educational curriculum for employees to help them meet new challenges.

# Banking in the Digital Age

No industry has been impacted more by the rapid developments in technology than the banking sector. Today, customers have higher expectations than ever when it comes to the digital products and services they want offered by their bank. DNB ASA, Norway's largest financial services group and one of the largest in the Nordic region in terms of market capitalization, is leading the way in creating a culture and management structure to increase the pace of innovation that keeps customers satisfied.



**Industry:** Financial

Company Size: 11,710

Share Value: \$21B USD



The Norwegian bank is accomplishing this by strengthening specific areas of competency, including technology and data analytics, hiring practices, and "upskilling" staff through continuing education. As part of a digital transformation initiative, DNB is adopting a data-driven approach not just to optimize and automate operations for sustainable business growth, but to enhance the customer experience.

For instance, the bank has troves of data including transaction details, credit scores, risk assessment reports, as well as detection and prevention of security threats. All of this presents DNB with new opportunities for revenue growth as well as building a competitive advantage over competitors.

DNB is charging ahead in this emerging digital landscape with the help of educational leader Udacity. Here's how.

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– DNB Case Study



## **Banking Challenge**

DNB is the definition of an "old money" European institution. The nearly 200-year-old bank has more than 11,000 employees, and \$200-plus billion worth of combined assets. It was looking to launch an aggressive project that would equip its employees for the digital future of banking. The bank recognized it had three key priorities that needed to be addressed in this digital transformation:

- Solve for skills gaps across the company
- Improve competency related to data and data science
- Empower and create opportunities for employees to develop new skills

Udacity can't be compared to anything else.

The participants have gained the latest expertise in machine learning and data science and are now working on highly strategic projects such as identifying fraudulent transactions.

-ISELIN SOMMERENG, SENIOR COMPETENCY DEVELOPMENT ADVISOR AT DNB



DNB was looking for a full-spectrum program that would have both breadth and depth. The financial services provider needed to educate a wide range of employees about emerging tech capabilities. These employees stretched across departments and had varied experiences and lengths of tenure—including some with more than 20 years of experience. All of these employees needed a continuous, intensive program with the ultimate goal of them gaining the skills necessary to help DNB become "a technology company with a banking license."

## The Udacity Impact

The development team at DNB explored various educational providers. The bank selected Udacity as a partner because of its expertise in offering a tailored, comprehensive education model. Some of the highlights to the program developed by Udacity:

- Three-and-a-half months of structured learning that taught hands-on technical skills
- Engaging content including videos, quizzes, and real-world exercises
- Experts in their fields who provided instant feedback and input

But the real proof of the program's success was the employee-students themselves.

There were 44 applicants and 14 were accepted for the initial project after completing the Udacity skills assessment. They shined.

DNB allowed applicants the opportunity to take courses full time while still being paid their full salary while they took part in the program. The learning program consisted of three parts. The first was the Udacity Data Science Nanodegree, which formed the core curriculum and drove the entire program. This was followed by real use cases from the DNB business and, finally, lectures (both external and internal) as well as workshops.

## DNB Learning Curriculum

#### NANODEGREE PROGRAM

# Artificial Intelligence Programming with Python

- Introduction to Python
- Jupyter Notebooks, NumPy, Anaconda, Pandas, and Matplotlib
- Linear Algebra Essentials
- Calculus Essentials
- Neural Networks

### NANODEGREE PROGRAM

### **Data Scientist**

- Solving Data Science Problems
- Software Engineering for Data Scientists
- Data Engineering for Data Scientists
- Experiment Design and Recommendations
- Data Science Projects

# **Measuring Success**

All 14 associates graduated from the full-time Nanodegree program, and more than 120projects were completed in Al Programming with Python and Data Science. The 100 percent graduation result meant that all the applicants had unlocked new projects, roles and responsibilities, and job titles in customer strategy – all led by data-driven insights.

One of the DNB employees who went through the initial Udacity program was Akshat Bhardwaj. He was a Senior Test Data Manager responsible for DevOps and data quality assurance across application clusters throughout DNB. Already a talented developer with a bachelor's degree in engineering and 14 years of IT experience, Akshat knew it was vital to expand and sharpen his skills. He also wanted to forge a new career path.

and where to start. There are some colleges and universities which offer degree programs, but I was uncertain about the depth and breadth of curriculum and what I would get. I wanted deep knowledge and handson experience on advanced analytics and not just some theoretical knowledge on data science.

-AKSHAT BHARDWAJ, SENIOR TEST DATA MANAGER



Akshat also didn't have the time for a full-time college program. But the Udacity program was a perfect fit. He found the course well-designed and challenging, the instructors top-notch and learned real-world technical skills to meet complex business problems.

In fact right after completing his Nanodegree program, he began working as a Data Scientist for DNB—using what he learned on a daily basis.

### **Summary**

Banks are changing at a rapid pace. And that financial institutions of tomorrow will look fundamentally different from today's banks. DNB is an innovation leader as it looks to stay ahead of the curve by investing in digital transformation.

This takes many forms. Changing the culture and mindsets of employees. Re-imagining and updating the digital infrastructure as well as transitioning away from legacy systems. Leveraging technology to improve its products and services. When employees have the most up-to-date digital skills, they can ensure customers receive the best services and products—creating greater brand loyalty. DNB is accomplishing this with the help of the leading education provider: Udacity.



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