Nike acquires Celect to optimize inventory, analyze consumer behavior, and tackle \$2bn in inventory write-offs

Nike's August 2019 acquisition of inventory analytics company Celect demonstrates the expected impact that **transformative technology** can have on a retailer's **operations and profitability**.

Celect's ML and Al-based consumer data science & demand forecasting technology allows retailers to understand customer shopping patterns in-store and online, helping retailers to estimate future demand and optimize inventory portfolios in stores and across the supply chain.

The acquisition is aligned with Nike's strategy of trying to **sell more directly to consumers** and shift business away from its traditionally dominant wholesale channel.

In 2019, Nike recorded nearly \$2bn in inventory write-offs. By helping Nike reduce out-of-stocks, excess inventory, and connect more directly with consumers, ultimately increasing revenue and reducing write-offs, Celect's technology is expected to make a direct impact to Nike's bottom line.







Based on ComCap's analysis, Celect's technology could be worth \$100's of millions over the next several years if it can even marginally reduce Nike's nearly \$2bn FY2019 inventory write-offs.

ComCap sees two primary drivers of value:

- A 2% reduction in inventory write-offs could generate \$130m in additional Net Income
- A 2% increase in sell-through rate could generate \$114m in additional Net Income

Over the next 5 years, these initiatives could combine to create a present value of \$244m in additional Net Income

Nike P&L (\$millions)	FY2019A	FY2024E
Revenue	\$39,117	\$56,459
Net Income	\$4,029	\$7,451
Inventory write-offs	\$1,820	\$2,450
% Net Income	45%	33%
Present value of Celect impairment reduction		\$130
Present value of Celect additional sales		\$114
Total present value of Celect technology		\$244

This case highlights the continued trend that ComCap has both predicted and tracked - major retailers are increasingly becoming technology companies in order to better adjust to a world driven by disruptors including Amazon and Google



Select technology acquisitions by retailers

Date	Target	Acquirer	
8/13/19	Sidestep Technologies Inc.	Custom Ink	
8/6/19	Celect, Inc.	NIKE, Inc.	
5/20/19	Boomerang Commerce	Lowe's Companies, Inc.	
4/11/19	Polymorph Labs, Inc	Walmart Inc.	
3/25/19	Dynamic Yield	McDonald's	
2/26/19	Aspectiva Ltd.	Walmart Inc.	
2/15/19	Operatedata Ltd.	Apple Inc.	
1/11/19	ZiipRoom, Inc.	Bose Corporation	
1/11/19	Askuity Inc.	The Home Depot, Inc.	
1/3/19	Wiggly-Amps Limited	Walgreens Boots	
12/13/18	Int Data Labs, Inc.	Walmart Inc.	
11/12/18	Unlockd Media	Wesfarmers Limited	
11/8/18	GlamST LLC	Ulta Beauty, Inc.	
11/8/18	Qm Scientific	Ulta Beauty, Inc.	
10/17/18	daco SAS	Vente-privee.com	
9/25/18	Upstream Commerce Ltd.	Flipkart	
9/13/18	Delivery Technologies	Walmart Inc.	
9/3/18	Dhurya Technologies Private Limited	Walmart Inc.	
8/21/18	Liv.ai Pvt. Ltd.	Flipkart	
8/1/18	Pretr Online Services Private Limited	Flipkart	
7/20/18	CuriosityChina	Farfetch UK Limited	



Select technology acquisitions by retailers

Date	Target	Acquirer	
7/16/18	Solvy Tech Solutions Pvt. Ltd.	Flipkart	
6/12/18	b8ta, Inc.	Macy's, Inc.	
5/2/18	STORY	Macy's, Inc.	
4/20/18	Detour.Com, Inc.	Bose Corporation	
4/9/18	Invertex Ltd	NIKE, Inc.	
3/22/18	Zodiac Inc.	NIKE, Inc.	
3/16/18	Modiface Inc.	L'Oréal S.A.	
3/8/18	BevyUp	Nordstrom, Inc.	
3/8/18	MessageYes	Nordstrom, Inc.	
2/5/18	Spatialand Inc.	Walmart Inc.	
12/13/17	Shipt, LLC	Target Corporation	
11/16/17	Outward Inc.	Williams-Sonoma, Inc.	
10/3/17	Parcel Inc.	Walmart Inc.	
9/29/17	Regaind, SAS	Apple Inc.	
9/28/17	TaskRabbit, Inc.	IKEA	
8/14/17	Grand Junction, Inc.	Target Corporation	
4/19/17	Inlogg Internet Pvt. Ltd.	Flipkart	
4/5/17	Decorist, Inc.	Bed Bath & Beyond Inc.	
4/3/17	Integra Commerce	Magazine Luiza S.A.	
11/28/16	GameChanger Media, Inc.	DICK'S Sporting Goods, Inc.	



Celect overview



Company Overview

Founded: 2013 Status: Acquired Employees: 50 HQ: Boston, MA

Company description:

Celect is a cloud-based, predictive analytics SaaS platform that helps retailers optimize their overall inventory portfolios in stores and across the supply chain, resulting in double-digit percentage revenue increases.

Its solutions include allocation optimization, fulfilment optimization, plan & buy optimization and inventory optimization platform. Its machine learning and AI tech allows retailers to understand customer shopping patterns in store or online and helps retailers to estimate future demand. It helps brands to increase revenue & gross margins, reduce markdowns, increase full-price sell through, and others.

Key Facts

- Prior to its acquisition, the company had raised \$30.2m in four rounds of equity funding
- Key investors are NGP Capital, Fung Capital, August Capital and Activant Capital
- Celect was named a disruptor in the 2019 Coresight Matrix for Inventory Optimization Software
- Named to Supply & Demand Chain Executive's SDCE 100 Top Supply Chain Projects for 2019
- The technology builds on a fundamental advance in customer choice modeling and machine learning called by MIT's Computer Science and Artificial Intelligence Laboratory one of the 50 greatest innovations it has ever produced

Management Team



Devayrat Shah

Devavrat co-founded Celect. He serves as Professor at Massachusetts Institute of Technology. Previously, he served as Associate Professor of Massachusetts Institute of Technology. He holds a PhD in Computer Science from Stanford University.



Vivek Farias

Vivek co-founded Celect. His research has led to numerous innovations in operations, supply-chain and yield management. Currently, he serves as Professor at MIT's Sloan School.

Past Clients

URBAN OUTFITTERS

ALDO

AÉROPOSTALE LUCKY*BRAND



Source: Company data, Press Releases

Celect is expected to provide value to Nike by optimizing inventory sales and reducing excess inventory write-offs

Estimated impacts to Nike's Net Income justify a \$100m+ present valuation

Assumptions	
Discount rate (Nike WACC + 5%)	12.5%
Inventory write-off reduction due to Celect technology	2.0%
Additional inventory sell through due to Celect technology	2.0%

Nike P&L (\$millions)	FY2019A	FY2020E	FY2021E	FY2022E	FY2023E	FY2024E
Revenue	\$39,117	\$42,131	\$45,534	\$49,044	\$52,622	\$56,459
Revenue growth		7.7%	8.1%	7.7%	7.3%	7.3%
cogs	\$21,643	\$23,109	\$24,707	\$26,244	\$27,574	\$29,133
% of revenue	55.3%	54.9%	54.3%	53.5%	52.4%	51.6%
Gross Profit	\$17,474	\$19,022	\$20,827	\$22,801	\$25,048	\$27,326
Gross Margin	44.7%	45.2%	45.7%	46.5%	47.6%	48.4%
SG&A	\$13,445	\$14,432	\$15,560	\$16,742	\$18,317	\$19,875
Net Income	\$4,029	\$4,590	\$5,267	\$6,059	\$6,731	\$7,451
Inventory write-offs % Net Income % of COGS (held constant)	\$1,820 <i>45%</i> <i>8.4%</i>	\$1,943 <i>8.4%</i>	\$2,078 8.4%	\$2,207 8.4%	\$2,319 <i>8.4%</i>	\$2,450 33% 8.4%
Nike effective tax rate	0.470	16.1%	15.9%	15.8%	15.5%	15.0%
Impairment add-backs						
2% of inventory write-offs impairment back into EBIT		\$39	\$42	\$44	\$46	\$49
After-tax Impact		\$33	\$35	\$37	\$39	\$42
Additional inventory sell through						
2% of write-offs back into inventory for sale		\$39	\$42	\$44	\$46	\$49
COGS % revenue		54.9%	54.3%	53.5%	52.4%	51.6%
Additional revenue from inventory sale		\$71	\$77	\$82	\$89	\$95
Gross Margin		45.2%	45.7%	46.5%	47.6%	48.4%
Additional Gross Margin from sale		\$32	\$35	\$38	\$42	\$46
After-tax Impact*		\$27	\$29	\$32	\$36	\$39

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^{*}Assumes Gross Profit flows through directly to EBIT

