



**Deloitte.**

## THE RIPPLE EFFECT

Stories of purpose and lasting impact

# A tale of data-driven turnaround

In a time of declining enrollment, Western Kentucky University went to school on AI and analytics.

# THE **ENROLLMENT CLIFF** WAS JUST UP AHEAD. COULD THEY **REVERSE COURSE?**

## THE SITUATION

It isn't news that we live in turbulent times, and higher education—traditionally an important stop on the road to the American Dream—hasn't been spared the disruption. Economic, cultural, and demographic forces have been affecting college enrollment for years; competing institutions have aggressive practices and offerings; a modern American generation that sees less value in earned degrees than their forebears; and the coming *enrollment cliff*—the downstream result of a great recession birth rate contraction. (The “cliff” refers to the year 2025, when the slowly shrinking number of college-age students will suddenly plummet by an average of 100,000 per year over the next four years).

Fewer prospective students, fewer of those prospects applying to college, and greater competition among institutions for those students: all this makes for a big squeeze on higher education, particularly regional comprehensive institutions.

Institutions like [Western Kentucky University](#) (WKU) in Bowling Green. By 2021, WKU found itself facing challenges: the COVID-19 pandemic was taking a sharp bite at enrollment numbers, but the hard(er) truth was that those numbers were already down some 20% since 2013.

At risk for WKU: Maintaining financial commitments to both tenured faculty and capital campaigns, as well as the real, existential prospect of an overall doom loop—lower enrollment = lower revenue = reduced student offerings = weaker recruitment = lower enrollment. So WKU leaders chose Deloitte.

In so doing, WKU unlocked access to the full breadth of the organization's thinking, experience, technology, and ecosystems. Deloitte professionals are well versed in the unique challenges and opportunities in higher education and have the hands-on experience to target solutions accordingly.

The project brief: Realign WKU's undergraduate enrollment and financial aid strategy with the university's overall strategic priorities. The plan: Identify—then matriculate, then retain—prospective students using big data, insights, and individualized, predictive analytics—all part of the Deloitte [IndustryAdvantage™](#) framework.



# THE SOLVE

First things first: Where would these insights come from? How do you predict the behavior of college applicants? The Deloitte team proposed a tailored approach: Combine WKU's own data with Deloitte's continually refreshed dataset of more than 270 million records of demographic, geographic, lifestyle, digital preference, and purchasing patterns for nearly every household in the country.

(Deloitte's *longitudinal* dataset, curated over years, makes it possible to not only predict the decision someone—say, an adult learner—is likely to make, but when they're likely to make it and why).

How would this data be put to work? Through [Candidate360™](#), a Deloitte artificial intelligence (AI) and predictive analytical enrollment management solution built on [Google Cloud](#). It would reference both datasets to generate insights and recommendations on how to optimize enrollment—both in the aggregate and on an individual basis. In other words, with Candidate360, WKU leaders could parse who the likeliest new prospects were; where they lived; what their barriers to matriculation might be; how financial aid offers might be optimized to entice them; even how likely they were to withdraw after having been accepted—all through user-friendly web dashboards.

Candidate360 would also help the Deloitte team provide WKU with bespoke, white glove service in three ways. First, by training the solution's AI models on WKU's cohort of historical applicants (thus focusing the models' predictive power on both the particular institution and the incoming cohort's unique preferences). Next, by executing *really* quickly—generating insights from WKU data within 12 weeks of import (something other providers in the past had suggested was not possible).

And finally, by deploying Deloitte professionals in advisory roles. These advisors—higher education veterans and all with hands-on experience, an IndustryAdvantage hallmark—had the acumen to look for opportunities at strategic points in WKU's enrollment cycle. (For instance: *This is when—and how likely—your cohort will need financial aid and would benefit from outreach.*) They were also able to translate those

*and would benefit from outreach.*) They were also able to translate those opportunities into new ways of using Candidate360.

Case in point: breaking the code on student applications for federal aid. This is both a bellwether for WKU enrollment and a thicket of complexity; it was also, in a pandemic year, an especially opaque black box. Here's how it all played out.

The Free Application for Federal Student Aid (FAFSA) website is the gateway to the country's biggest source of student aid—including Pell Grants, awarded to students with exceptional financial need. Past instances of the FAFSA application were also notoriously hard to navigate, leading many qualified applicants—often first in their family to apply for higher education, and already intimidated by the process—to simply give up. This meant a sizable group of prospective WKU students had completed neither FAFSA nor admissions applications, which, in turn, meant reduced data for WKU planners—data they relied on to predict need for student financial aid.

So the Deloitte team focused on data that *was* available to them—that is, their own dataset and WKU's historic data. Then, to extract accurate predictions, they got innovative with Candidate360. The result of this combination of industry insight, data, and solution: a *Pell Eligibility Predictor*.

This Predictor had a profound ripple effect for WKU and prospective students. It helped WKU understand which students were *likely* to be Pell eligible (i.e., low income). This, in turn, gave focus to community outreach to encourage these students to complete their FAFSA forms and apply to WKU's available need-based scholarships. The Predictor notified students that WKU offered resources to help with FAFSA applications, which addressed the intimidation factor FAFSA presented and eased student anxiety about tuition and scholarships. And *this* is how WKU met its goal of assessing financial need for the upcoming class—all months before WKU would have received completed financial aid forms (via FAFSA or direct application) in “normal” times.

HOMEGROWN KNOWLEDGE + PREDICTIVE ANALYTICS  
= ENROLLMENT GROWTH

# THE IMPACT

Success. A year into deploying Candidate360, WKU was logging remarkable, concrete enrollment results. On the strength of its new analytics, WKU teams launched and executed a multipronged recruitment strategy that identified more than 20,000 new, high-fit, likely-to-apply high school students. This strategy resulted in a 4% pre-Census enrollment increase of 100+ net new students, with a \$2.3 million boost in expected net tuition revenue.

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“Candidate360™ analytics are the real deal,” says Ethan Logan, PhD, and then-Vice President of Enrollment & Student Experience at Western Kentucky. “[Candidate360] really accelerated the individualized insights available to our enrollment team, helped us optimize the full enrollment life cycle, deliver results to key university stakeholders, and—more importantly—set our student applicants up for success.”

To that end (and beyond the numbers), the ongoing effort has helped WKU make quicker decisions about scholarship eligibility, understand the relative financial need of each incoming class, identify the personal barriers that impact student yield, enable personalized outreach proactively to build a unique and diverse incoming class, and—among other things—support first-generation enrollment throughout the enrollment process.

A happy ending, if only for a first chapter; with WKU’s speed and quality of insights should only increase, compounding both enrollment and net tuition revenue, and setting the stage for a promising story to come.



JUST LIKE THAT, AN AI-DRIVEN STRATEGY  
RESHAPES HIGHER ED

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Learn more about Deloitte **IndustryAdvantage™**



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