# TECHNOLOGY & INNOVATION

# It's an Amazon jungle out there

Local shops and booksellers had best up their game if they want to stick around

BY FARHAD MANJOO

didn't make a lot of friends in the retail and publishing industries when I suggested that independent bookstores were evil. I argued that by making it cheap and easy for people to buy a lot of books, . Amazon has been a boon for the book industry and "literary culture" in a way that many bookstores cannot match.

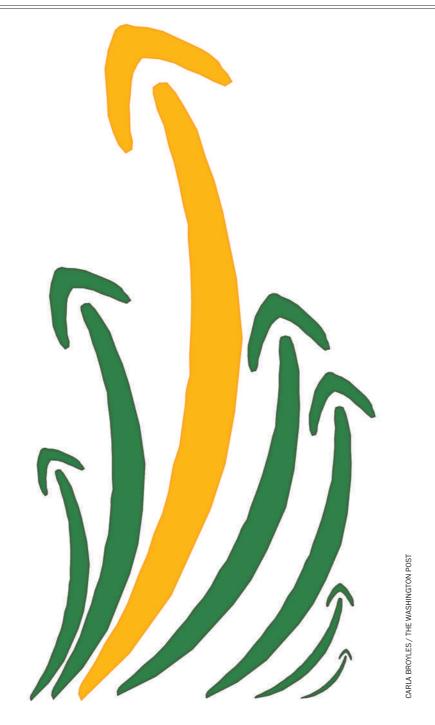
Many defenders of bookstores countered that by focusing on dollars and cents, I'd missed the whole point of these establishments. Bookstores, it turns out, don't primarily exist to sell books - instead, they're more like bars for readers. "Bookstores provide a space to meet

friends, cruise for a date, and hide out when you have nothing to do on a Saturday night,"

Will Doig wrote at Salon. I suspect that many bookstore lovers agree with Doig, which is exactly why many of these shops are going out of business. Bars can survive because alcohol is an extremely profitable good. Books aren't - so if you think of your favorite bookstore as a comfortable spot to find well-read potential mates rather than as a place for commerce, you're not helping its owner.

If you want bookstores to stick around, you should root for them to improve the way they sell stuff. Booksellers won't survive the Amazon onslaught by merely wagging their fingers at the retail giant. Their only hope is to match the commercial innovations Jeff Bezos has brought to shopping. Indeed, this applies to all retailers, not just bookstores. The Internet has revolutionized how we buy stuff, but the main beneficiaries of this revolution have been warehouse companies like Amazon rather than firms that maintain a physical presence in your neighborhood. But it doesn't have to be this way. This month, Amazon offered customers a discount to buy stuff online while they were shopping at local establishments. It's time neighborhood retailers fought Kindle Fire with Kindle Fire. Indeed, tablets and smartphones could be store owners' best weapons against Bezos — if only they'd embrace them.

Take reviews and recommendations. Pretty much everyone uses the Web to research products before they buy them. Amazon has turned this fact into a competitive advantage; by collecting and curating reviews for more than a decade and by creating an efficient recommendations engine based on millions of buying decisions — the firm has become the first place many people look for product information. This database, which Bezos's firm spent a huge amount of time and money to build, can just as easily be harvested by local retailers who invested nothing in its creation. If I ran a hardware store, I'd put up a sign encouraging in-store research: "Looking for a drill? People on Amazon love the Black & Decker 9099KC. We offer free WiFi, so feel free to pull out your phone and browse online reviews!" Book-



stores could do the same thing: "Confused about which baby sleep-training book is best? The No-Cry Sleep Solution gets nearly 5 stars on Amazon."

Of course, many stores are skittish about letting customers browse online. I often look up product reviews and prices when I'm shopping, and I've been busted several times by employees enforcing a strict no-bar-code-scanning policy. I'm always offended by such policies - why shouldn't I research the best gas grill before I buy it? — but I can see the stores' rationale. Prices online tend to be cheaper, so if I'm looking something up on my phone, there's a good chance I'll be attracted to the discount and walk out of the store empty-handed. Market research backs this up. One survey sponsored by Motorola found that in many retail categories — especially consumer electronics, sporting goods and books — people use their phones primarily to compare prices and that checking product reviews is usually a secondary use.

But fighting the price checkers is a futile endeavor. People think of their phones as constant companions, so you'll never persuade them to keep them stuffed in their pockets. Plus, according to the same Motorola study, price isn't always the primary reason that people decide to walk out without buying anything. Respondents said that the main reason they leave bookstores "without the item that you wanted" is that the store didn't have the book they came looking for. That was true at toy stores, furniture shops and drugstores, too. Other popular reasons for leaving a store without buying stuff? The customer couldn't find the item, thought the lines were too long or found the staff unable to answer questions.

Smartphones could help stores address each of these problems. AisleBuyer, a start-up based in Boston, has created a way for local stores to make their own smartphone apps. Among other features, these apps let customers shop from their phones — when you're ready to buy that

book, press a button and walk out the door. AisleBuyer also collects and mines sales data from many of its clients, which means that over time, it will be able to build the sort of recommendations engine that powers Amazon. If your local record store uses an AisleBuyer app, then, it might suggest — based on your previous purchases — that you come in to get the new Adele album. Because the app tracks how often you've bought stuff, the store could give a discount for loyalty.

Apple could also serve as a model for other retailers. Just before Thanksgiving, the company released an updated version of its retail app, which you can fire up when you enter an Apple Store. In addition to letting you buy products from your  $phone\ and\ pick\ up\ stuff\ you've\ purchased$ online, the app connects you to sales staff members who can answer your questions. Say you go to an Apple Store to buy a laptop. You look at the various MacBooks, and you narrow your choice down to the 11- and 13-inch MacBook Air. Which should you buy? Just pull out your app and hit Get Help. This alerts an employee, who sees a map of the store on his iPod Touch; your location is highlighted on his map. So he walks over to make the sale. Anvone who's ever tried to wrangle help in a busy electronics store — or a home improvement shop, a shoe store, a bookstore, anywhere — will recognize that this is a killer feature.

Most indie bookstores don't have the resources to fund their own app development. But tech consultants like AisleBuyer are making this sort of thing more affordable, and as customers get accustomed to shopping while clutching their phones, these apps will become just as important to local retailers as Web sites are now. If you own a store, I'd suggest you start thinking about building such an app. Right now, Amazon is stealing your customers. This is a way to fight back.

Manjoo writes for Slate about technology, the future and what to do about it.

#### WASHINGTONPOST.COM/ONSMALLBUSINESS

## U.S. grads heed call of emerging markets

Start-ups in India, China, Brazil offer challenge, résumé-building

BY OLGA KHAZAN

Brett Bivens is a sports fanatic from Michigan who graduated from college last year, found a good banking job in Chicago and had a bright future in finance. So his family was taken aback when, a few weeks ago, he told them he had accepted a job at a little-known start-up — in India.

After a year in corporate banking, Bivens was looking for a job at a small, fast-growing organization where he could make a big and lasting contribution. He also wanted his work to be sports-related, which further narrowed his search. Then he stumbled on what seemed like the perfect opportunity.

The job was at Krossover Intelligence, which allows high school and college coaches to upload game footage and receive detailed statistical analyses 24 hours later. Bivens's job would be to oversee operations in Bangalore, where many of the company's developers are based.

"It was kind of shocking that each bullet point on the job listing was exactly what I wanted to do," he said. "The kicker was that it was in India."

Bivens is part of a growing faction of graduates from U.S. universities who depart for emerging economies soon after getting their degrees.

India in particular has become a magnet for graduates who seek a start-up experience, a lower cost of living and a global element for their résumés, said Kunal Bahl, the founder of Snapdeal, an Indian e-commerce site.

"There's a sense of excitement people see in India," Bahl said. "There are tons of fast-growing companies there that are run by young people. And there's a great deal of openness to that among

non-Indians." Most of them want a slice of India's booming economy, which grew 9.7 percent last year, compared with 2.8 percent growth in the United States. E-commerce and other online start-ups are flourishing in India, often by replicating the success of American companies. Venture capital investment in Asia has tripled since 2006, and India has the second-largest mobile market in the world after China. (Snapdeal adds a new user every four seconds, Bahl notes.)

The boom has brought with it a market for U.S.-trained product managers, operations specialists and the like. The Indian job site Shine.com is holding job fairs in New Jersey and California, and a few months ago Bahl was recruiting for his company at top U.S. business schools. He said he received about 2,000 résumés within three weeks.

### Adding sought-after skills

Bahl, who graduated from the University of Pennsylvania's Wharton School of Business, said he believes that moving to an emerging market is a smart move for businessschool graduates who want to put a global spin on their résumés and make themselves more attractive to hot U.S.-based companies in the fu-

"Someone coming out of an MBA might be looking for a product-management role at a fast-growing company, but there are a finite number of

those companies in the U.S.," he said. For California native Valerie Wagoner, India was the end-goal. A Stanford graduate with an interest in entrepreneurship and emerging markets, she went to Bangalore in 2008 to work for a mobile payments company. After two years, she cofounded a mobile-phone marketing firm called ZipDial.

"It's definitely a growing market for mobile, and there are a lot of interesting business opportunities that come out of that," she said. "Plus, they speak English here."

In addition to speaking the same language, Indian start-ups also share a culture with their American counterparts. Start-up offices in Bangalore look like they could be in Silicon Valley, with jeans-wearing 20-somethings busy writing new computer code, Bahl said.

"There is a lot of cross-cultural exposure between the U.S. and India," Bahl said.

### **Home-field advantage**

Globe-trotting Americans such as Bivens and Wagoner are still relatively rare. The majority of those who turn to India and other fastgrowing economies for business opportunities are natives of those countries who, like Bahl, came to the United States for the degree but didn't stay for the job market.

The difference is that a decade

ago, more foreign students attempted to stay in the United States after graduating. Now, they are increasingly taking their freshly-minted U.S. degrees home. Shari Loessberg, a professor of global entrepreneurship in the Sloan School of Management at MIT, said about half her Indian students wish to return home, and nearly all of the Chinese and Brazilian students do. In surveying Indian and Chinese

workers who had returned home with degrees, the Kauffman Foundation found that "72 percent of Indian and 81 percent of Chinese returnees said that the opportunities to start their own businesses were better or much better in their home countries." More than half of the businesses started by Indian returnees were in information technology, and most had two to 50 employees.

Wagoner said that while a fair number of non-Indian Americans go there to work for start-ups or to intern, the majority of American graduates who start businesses there are ethnically Indian. Just as Americans bring beneficial skills to the Indian start-up scene, she said, natives generally have an easier time running companies.

"Broadly generalizing, communication skills, writing, presentation - those are all things that are emphasized more in U.S. education than in Indian education," she said.

"But a foreigner cannot get everything done in business here that an Indian person can get done."



**Brett Bivens** took his new business degree to India.

#### The talent pool Vasu Kulkarni, Kross-

over's 25-year-old founder, grew up in India and attended the University of Pennsylvania. He started Krossover in 2008, when fundraising was an uphill battle and American developers were both rare and expensive.

"Everyone and their mother seems to be doing a start-up these days, and the good developers have been snapped up by the Facebooks and Googles of the world," he said. "The talent pool has definitely

Leveraging his background, Kulkarni found a team of developers in Bangalore whose efforts would cost a fraction of what their American equivalents would. The nearly 12-hour time difference also allows Krossover's programmers to write code during New York's nighttime, so features can be developed faster.

But there was, in fact, one big cultural problem: The Indian employees aren't familiar with the American sports that Krossover ana-

"When they had a question about something at 2 a.m. our time, we thought it might be useful to have an American guy who has played these sports on the ground there," Kulkar-

When he listed the job opening, Bivens was the first person to respond. Kulkarni knew right away he had found his guy.

"We needed someone who's young and loves sports - and someone who's adventurous enough to pack their bags and move across the world," Kulkarni said. "I never got the sense that he was worried or thinking twice."

### Life in India

Bivens arrived in Bangalore in early December and is staying in a hotel while he gets acquainted with the city that will be his home for the next year or two. He said he's enjoying living a typical start-up life, complete with long hours, a frantic pace and a fun, collaborative environment. He keeps in regular contact with Krossover's New York office.

"Everyone there has been so supportive," he said. "They totally understand that it's tough to jump into a new culture."

Life in India isn't without its quirks. Bivens was most surprised by Bangalore's nightmarish traffic another aspect of the city's exponential growth. And while the city is modern and relatively cosmopolitan, it does face occasional power outages and water shortages.

A recent tweet from Wagoner reads: "In 10-min span, kid living next door just got mugged & I found a rat living in the vent for my stove. India is not for the feint of heart."

"There are some things that we take for granted in the U.S.," Wagoner said. "I don't tell everyone to come over — they have to really want it. But if they do, it's an amazing experi-

khazano@washpost.com

## WASHINGTONPOST.COM/INNOVATION

## Eastern Europe: Innovation's hidden hub

BY FRANCIS TAPON

I was struck by a simple innovation while I was washing my dishes in Belarus. The kitchen cabinet, which was placed over the sink, had dish racks embedded into it with an open bottom. You could place the dripping dish directly into the cabinet. Water would drip through into the sink. With no need for a separate rack, Belarusans gain extra counter space and the washed dishes are immediately put away. It's a clever solu-

tion for those without a dishwasher. Eastern Europeans aren't known for being innovative, but in some ways the stereotype is unfair. Hungarians, for example, invented the ballpoint pen and holography. A Hungarian, John George Kemeny, co-invented the BASIC programming language with American Thomas Kurtz. Hungarians also invented artificial blood and the Rubik's Cube. Four Estonians designed Skype. Russians were the first in space, made the biggest nuclear bomb, designed Tetris and created the AK-47 assault rifle.

Considering that respect for intellectual property and minimal corruption are needed for innovations to proliferate, such feats are remarkable. After all, the region has a long history of heavy-handed governments and a weak rule of law.

With a weak rule of law to protect patents, inventors take their creativity elsewhere. According to the Levada Center's poll last May, 22 percent of Russians said they would like to live abroad. Most of those are young, educated Russians — exactly the people Russia needs to keep.

The brain drain and poor intellectualproperty protection creates a vicious cycle in which companies are unwilling to spend much on R&D. To change that, Russia is investing billions in the Skolkovo Innovation Centre, nicknamed Inograd (Innova-

tion City). The groundbreaking is set for May. Entrepreneurs will focus on physics, medicine, energy and IT. Microsoft, Ericsson, Google, Cisco, Intel, Dow Chemical and MIT are investing in what many expect to become Russia's Silicon Valley.

Nevertheless, innovation is only half the battle. Eastern Europe's biggest challenge is getting innovations adopted and diffused throughout their region and beyond. Eastern European minds have built some of America's best technology. Intel's co-founder was

Hungarian, and its first investor was a Russian immigrant's son. Google co-founder Sergey Brin was born in Russia. A Bulgarian invented the digital wristwatch. Eastern Europeans who stay home are reaping rewards. In 2011, two Russian Internet giants, Mail.ru Group and Yandex, each had an IPO that raised more than \$1 billion.

Integral, an American company, is taking Ukrainian innovation and building on it. Co-founder Viral Tolat leverages Ukrainianbuilt software for Integral's foreign exchange trading platform.

In Estonia, I saw the future. Estonians, for example, have had the option to vote for political candidates online for years. My Estonian friends paid me by sending money between our mobile phones. They often pay for parking with a text message. Estonia, from a technological perspective, would feel like Tomorrowland for most Americans. The flow of innova-

tion is no longer a one-way street.

Hungarians Tapon wrote "The Hidden Europe: invented the What Eastern Europeans Can Teach ballpoint pen.