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Courier



An Iraqi military vehicle set afire by Islamic State in Anbar

Islamic State introduced itself to most Americans this summer through two infamous beheading videos. They were professionally produced films, released by what U.S. intelligence officials would later call the most sophisticated terrorist propaganda machine they've seen. (On Nov. 16, Islamic State said it had beheaded an American Muslim convert and aid worker, Peter "Abdul-Rahman" Kassig.) But as the group has continued to make gains despite international air attacks in the wake of the beheadings, it's become clear that its sophistication reaches well beyond video production and messaging. It's evident in military operations, such as Islamic State's recent quick conquest of the ancient Iraqi city of Hit in Anbar province through a precision use of suicide car bombers, and in its ability to replicate the operations across the region.

The group's leaders portray themselves as akin to seventh century warriors thundering forth on horseback to expand their religious empire by sword. They call their car bombs "steeds" and their drivers the "death admirers, the knights of martyrdom." But in many important ways they have much less in common with medieval warriors than they do with modern bureaucrats, and a successful attempt to defeat them may require understanding their logistics, their financing, and their management structure as much as their extreme theology.

It may sound bizarre for a group calling itself a caliphate, but the foundation of its management model, as identified by experts, is more akin to that of General Motors than it is to a religious dynasty from the Dark Ages. After decades, we may have arrived at the ultimate professionalization of terror.

During a routine January 2007 patrol in Anbar province, in a town along the Euphrates called Tuzliyah al Gharbiyah, a unit of U.S. Marines stumbled on a cache of nine documents in a roadside ditch. They included financial records, payrolls, supply purchase records, administrative records, and other details of fund flows into and out of a single local cell in Anbar of a group then calling itself the "Islamic State of Iraq." Not long after, Iraqi

militiamen working with the U.S. stormed a home in a town farther down the Euphrates. They found a computer hard drive holding ledgers with 1,200 files detailing the finances and operations of provincial-level managers overseeing the cell and others like it across Anbar province.

Taken together, the Anbar records allowed for a forensic reconstruction of the back-office operations of a terrorist insurgency from its local level up to its divisional headquarters. The data were handed over to the National Defense Research Institute of Rand Corp., a U.S. Department of Defense-funded think tank based in Santa Monica, Calif. Seven researchers set out to determine what the ledgers, receipts, memos, and other records meant. What they concluded in a 2010 report, written for then-Defense Secretary Robert Gates, should be familiar to students of business management: The group was decentralized, organized, and run on what's called the "multidivisional-hierarchy form" of management, or M-form for short.

It's the structure that started taking root in the corporate world in the 1920s, thanks to Alfred Sloan's decision to reorganize GM. After becoming GM's president in 1923, Sloan began transforming the company by creating semiautonomous divisions

The foundation of Islamic State's management model is more akin to General Motors than to a religious dynasty

ordered largely around geography, freeing him and other top leaders from daily decision-making to focus on strategy and overall performance. Divisions also were largely self-financed. Scholars credit his model for GM's extraordinary growth in the early 20th century. It contrasted sharply with what had been the dominant "unitary form" of management, where control is centralized. In a pioneering study, the late Pulitzer Prize-winning historian and Harvard business professor Alfred Chandler Jr. held up the success of GM and others as a triumph of the M-form structure of corporate management, as did Oliver Williamson, winner of the Nobel Prize for economics in 2009.

According to the Rand study, Islamic State of Iraq was set up along the lines of the best multinationals studied by Chandler and Williamson. (The researchers even cited the Nobel Prize winner's work.) The Anbar provincial division offered influence, oversight, and some financing to smaller, semiautonomous cells within the province, closely monitoring their books and their results. But it left day-to-day decisions to the local commanders. The cells carrying out the group's daily functions were organized into units such as finance, intelligence, military, medical, media, logistics, and even a courier arm called the "mail" division. Bosses for each specialty at the headquarters for Anbar province monitored performance of their local divisions, sometimes relying on detailed reports from the field. But command decisions appear to have been left largely to the locals, Rand found.

The seized hard drive containing 1,200 files was especially valuable. It appeared to belong to the man who was akin to Islamic State of Iraq's divisional auditor. The group maintained strict accounting procedures, and its financial functions were organized in the same semiautonomous model of the M-form structure.

The ledgers showed the group generated enough cash to create a self-sufficient organization across Anbar. During one 11-month period, it raised almost \$4.5 million. More than

half of that appears to have come from the sale of stolen goods, such as construction equipment, generators, and other items. The provincial organization also got cash via local cells controlling smuggling routes and extorting "taxes" in their areas. The group had an entire "spoils" division dedicated to selling property looted from its enemies, largely Iraqi Shiites. At one point, "spoils" revenue surged, suggesting to Rand researchers that leaders had specifically asked locals to seek more plunder when operations demanded more cash.

The divisional leaders could send or redirect money to field subunits, bolstering operations at critical times. They sent surpluses back up to a "national treasury." Cash flow was also decentralized. Moneymen at all levels would hold no more than two weeks' worth of operating cash at a time, making it harder for U.S. forces to disrupt the overall structure with individual raids.

Running a decentralized organization didn't insulate the group's chief executive, at least not for long. By April 2010 the average tenure for the top boss was about 39 months, with both men who had held the post killed in U.S. airstrikes. When the group announced its new chief in May 2010, it issued only his Arabic nom de guerre, maintaining his anonymity: Abu Bakr al-Baghdadi "al-Qurashi." His purported lineage made him religious royalty. The use of "al-Qurashi" signified he was descended from the Quraysh tribe, into which the Prophet Muhammad was born during the sixth century. He was later identified as Ibrahim Awwad Ibrahim Ali al-Badri al-Samarrai, born in Samarra in 1971.

In a biography made to appear as if it were written on a yellowing, ancient scroll, the group claims its leader earned a doctorate in Islamic studies and served as a prominent cleric. His rivals have disputed those credentials. What's undisputed is his arrest on suspicion of supporting terrorism, following the U.S. invasion of Iraq. He was imprisoned at Camp Bucca, a U.S. detention center. While there, al-Baghdadi would meet the fiercest enemies of the U.S. occupation and its new Iraqi government, including both religious zealots and secular military commanders who had served under Saddam Hussein in the Ba'ath Party. Although accounts conflict, it appears that, after his release, a small

The Metrics of Terror

Murder as it's accounted for in Islamic State's annual report for the year ended November 2013

Type of operation	Baghdad		Nineveh		Southern Baghdad		Diyala		Anbar		Salah ad-Din, N. Baghdad		Kirkuk		Totals	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Assassination	171	95	162	438	77	130	67	78	26	108	63	202	19	32	585	1,083
Armed attack	13	73	549	69	67	53	83	19	91	48	71	50	13	24	887	336
Bombing	1	4	153	132	52	59	33	96	42	146	77	108	1	12	359	607
HBIEDs	13	6	148	365	41	52	111	140	87	63	122	275	26	114	648	1,015
Prisoners freed	SEVERAL	HUNDREDS	0	0	0	0	0	0	0	0	DOZENS	0	0	0	DOZENS	HUNDREDS
SVBIEDs	6	1	1	23	4	2	4	6	1	18	3	11	3	17	22	78
SVESTs	7	81	2	11	2	7	0	11	3	21	2	24	2	5	18	160
VBIEDs	69	251	36	27	48	125	44	38	33	23	68	47	32	26	330	537
MCBIEDs	2	1	2	0	0	1	4	2	7	4	6	4	1	2	22	14
IEDs	136	78	950	1,672	318	370	411	555	450	617	352	931	147	242	2,764	4,465
Knife murders	0	0	7	0	41	0	0	0	0	0	0	0	0	0	48	0
Targeted attacks	0	51	4	393	3	92	0	103	0	156	8	217	1	35	16	1,047
Sniping	0	0	1	4	1	18	4	29	0	4	13	2	0	0	20	57
Apostates repented	0	0	0	0	SEVERAL	HUNDREDS	0	SEVERAL	0	0	SEVERAL	0	0	0	SEVERAL	HUNDREDS
Cities taken over	0	0	0	0	0	0	0	0	1	5	0	3	0	0	1	8
Apostates run over	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Checkpoints set up	0	0	0	4	0	3	0	7	0	7	1	4	0	5	1	30
Rafidah expelled	0		DOZENS		0		DOZENS		0		0		DOZENS		HUNDREDS	

HBIED—House-borne improvised explosive device
SVBIED—Suicide vehicle-borne improvised explosive device
SVEST—Suicide vest

VBIED—Vehicle-borne improvised explosive device
MCBIED—Motorcycle-borne improvised explosive device

IED—Improvised explosive device
Rafidah—A perjorative term for Shia Muslims

jihadi group al-Baghdadi led pledged allegiance to Islamic State of Iraq, bringing him into its management ranks via a merger.

It's difficult to know how much al-Baghdadi tweaked the organization's management model after taking over in May 2010. But Islamic State's own publicly issued reports and statements show it remains structured in the M-form, with 18 semiautonomous provincial divisions drawn across Iraq and Syria. Even for major military campaigns, top leaders may declare the goals, but the precise timing, tactics, and resources used are likely left in the hands of local commanders, says Michael Knights, a military analyst and fellow at the Washington Institute for Near East Policy specializing in Iraq.

Under al-Baghdadi's leadership, the group compiles detailed data on the daily operations and performance of its divisions. Performance is measured by deaths in places like Hit, where the group detonated five car bombs in one October evening to soften the town's defenses. In March the group tweeted a link to a sort of annual report written in Arabic and covering 410 pages. It details attack-related metrics drawn from 7,681 operations executed in Iraq during the Muslim calendar year ended November 2013. The data are extensive, measuring casualties across 18 different types of operations in 2012 and 2013. These include assassinations (almost doubling in 2013, to 1,083), suicide car and truck bombs (more than tripling, to 78), and detonation of roadside bombs or other so-called improvised explosive devices (4,465 in 2013, up 62 percent from the previous year).

The attacks are coded by seven regions Islamic State maintained for Iraqi operations until the group's expansion this year; organizing data geographically may help it apply resources across its territory for operations, including the deployment of suicide bombers. In the year covered by the report, Islamic State sent 240 of its members to their deaths via suicide attacks.

This last piece of data represents a critical management task, says Mohammed Hafez, who studies the movement and use of transnational suicide bombers. "It's a matter of human resource allocation," says Hafez, chairman of the department of national security affairs at the Naval Postgraduate School in Monterey, Calif. Suicide bombers often are drawn from among the group's cadre of thousands of foreign fighters. "They are trying to put people in the right spot," he says. "If you have no skills or you can't speak Arabic, the easiest thing for you to do is drive a car and blow it up. Everyone knows how to drive." Skilled and experienced fighters, he says, are needed for combat.

Researchers at the Combating Terrorism Center at the U.S. Military Academy at West Point were skeptical when they viewed the data in the group's annual report. After all, these weren't captured internal documents like those studied at Rand, but part of a propaganda effort. Yet by comparing the group's reporting with press accounts for almost 200 attacks in the Baghdad area, the West Point analysts found Islamic State's self-reported casualty numbers were, for the most part, accurate.

Alexander Cooley, chairman of the political science department at Barnard College, Columbia University, has applied Chandler's and Williamson's iconic studies of corporate management to military occupations and empires. He hasn't studied Islamic State in depth, but he says the way the group compiles its metrics evinces a frightening yet "very rational managerial approach" under the corporate model, adding: "You start comparing the practices of these modular units across the board. ... You benchmark the behavior of unit Z vs. unit Y, and then, if there is a problem or an issue and one's not performing, you can draw attention to what's going on."

Now that the group, its operations, and its territory are all expanding so rapidly, Cooley says maintaining such detailed performance data may be difficult. "So what you do" as a chief

executive, he says, "is you focus on the selection process of your managers. You try to find people who are ideologically and procedurally aligned with you beforehand."

This may be less of a challenge for al-Baghdadi than it's been for others. Well before he started his march across the region over the summer, he spent an entire year gathering hundreds of experienced personnel, including veteran leaders. Mostly, he broke them out of cell blocks in prisons across Iraq. Many were on death row.

In September 2012, an Islamic State suicide car bomber struck the front gate of Tasfirat Prison in Tikrit, the hometown of Saddam Hussein. Abu Waqqas al-Ansari, who was scheduled to be executed, and other inmates got into the prison's weapons storeroom and initiated an assault from the inside. A video of the operation, shot through the green tint of a night-vision lens, shows intense bursts of automatic weapons fire all around the prison as flames lap into the night sky from behind its walls. About 100 inmates were freed, including senior members of the organization, according to press reports at the time.

It was the first major operation in what al-Baghdadi publicly unveiled in July 2012 as the "Destroying the Walls" campaign. His aim was to spend a year freeing the group's leaders and fighters from Iraq's prisons to "refuel" operations; many of those he would free had been imprisoned by U.S. forces during the occupation of Iraq. Islamic State produced and released a video featuring al-Ansari speaking to other jihadis assembled in the desert, his face hidden behind a red-and-white-checked kaffiyeh, a ubiquitous Kalashnikov-style rifle hanging by a strap over his right shoulder. "We advise that getting killed in prison [break-outs] is better than getting hanged by the ropes of the Rafidahs," he said, wagging his finger in the air and using a pejorative term for Islamic State's religious enemies, the Shiites, who make up the biggest religious or ethnic group in Iraq's population.

Under a full moon on the night of July 21, 2013, Islamic State fighters simultaneously eliminated checkpoints along the road to Baghdad's Taji and Abu Ghraib prisons, then cut off the roads. Using artillery rockets and mortar fire, they shelled military bases near each prison, where soldiers were encamped to support the jailers. Suicide car bombers then struck the gates and walls of the two prisons, before other suicide car bombers detonated amid arriving reinforcements. Fighters stormed the gates, freeing an estimated 1,000 inmates.

It's hard to know exactly which former inmates ended up in what positions, but Iraqi officials and supporters of Islamic State alike said at the time that senior leaders and regional commanders were among those sprung. Supporters took to social media to declare it the most important jihadi operation since Sept. 11, given the personnel who escaped.

According to Knights, al-Baghdadi has also recruited as Islamic

Al-Baghdadi spent a year gathering experienced personnel. Mostly, he broke them out of prisons. Many were on death row

State expanded across newly acquired territories. Calling it a “mergers-and-acquisitions strategy,” Knights says the group absorbs entire jihadi networks into its ranks after it overtakes an area, beginning with the networks most closely aligned to its ideology.

Islamic State is run by Sunnis, who are a minority in Iraq but make up the majority of Muslims. Many former senior Ba’athists, the secular Sunnis who ruled under Saddam, maintain top posts. Al-Baghdadi’s two leading deputies were both ranking Ba’athists. But a report in November by the Soufan Group, a New York-based private intelligence firm headed by former American and British counterterrorism and intelligence officials, says Ba’athist influence inside the group has declined recently, given the exponential growth of religious-extremist recruits since the start of the Syrian civil war. These fighters likely “brought military and organizational skills” into al-Baghdadi’s orbit, according to the Soufan Group.

The Syrian war also gave al-Baghdadi another asset: oil. It’s helped make the group rich. Starting with its violent seizure of border crossings in Syria last year, which allowed it to profit from oil smuggling, Islamic State has built an asset base around crude widely estimated at up to \$2 billion. By August it controlled more than a dozen oil fields in Iraq and Syria, which were estimated by the International Energy Agency to be generating 70,000 barrels a day. U.S.-led airstrikes subsequently reduced that output by 70 percent, according to the IEA.

But even if the group’s oil capacity continues to be greatly diminished, its local divisions are likely just as self-sufficient as they were in the past, generating income via its vast new trove of plunder, through the extortion of local populations, smuggling, and other rackets. Brett McGurk, a U.S. Department of State official who is President Obama’s deputy special envoy on the crisis in Syria and Iraq, told Congress in July that even before Islamic State seized the Iraqi city of Mosul, the group was “generating nearly \$12 million per month in revenue through extortion and smuggling rackets” from Mosul residents. Now it has control of the city, its banks, and its businesses, plus area farming operations and factories.

Multiply that across Islamic State’s territory in two countries, and it’s clear why the Soufan Group concluded this month “that the financial resources of The Islamic State will allow it to consolidate its territory and build its support in both Iraq and Syria for the foreseeable future, even if its income declines for the lack of technical expertise or the denial of territory and resources as a result of local or international action.”

The challenge for the group now is serving the needs of the estimated 6 million people it rules. These are the moments, says Cooley, the political scientist at Barnard, when a decentralized management structure can be most seriously challenged and when those who want to weaken it can find their opportunity.

After more than a year in power in Raqqa, a town in northern Syria, independent press reports suggest the transition has been professional and efficient, albeit with the brutal executions of opponents and innocents. Islamic State featured its rule of Raqqa in the first issue of a propaganda magazine it calls *Islamic State Report*. The magazine carried a Raqqa photo spread and interview with the head of consumer protection titled “On Patrol

With the Consumer Protection Authority.” A restaurant inspector was shown stooping to sniff a large stewing pot. “It’s an office that’s concerned with protecting shoppers by inspecting the goods being sold in shops, markets, shopping centers, and wholesale outlets, discovering goods that are spoiled or not suitable for sale and taking those responsible to account,” the consumer protection official said.

The group has tried to produce similar propaganda about its newly acquired Iraqi territories in a recent issue

of its English-language magazine, *Dabiq*. (It’s named for a Syrian village extremists believe will be the site of their apocalyptic battle with the West.) A photo spread, following a grisly picture of slain Kurdish soldiers, is long on glossy images proclaiming progress but devoid of the kind of substantive metrics the group has made public about its military and terrorist operations. One picture shows about two dozen elderly men eating lunch at a long table in a nursing home in Nineveh province. Islamic State’s black banner is simply tacked on a pink-painted wall at the end of their table. It also released a photo spread on Nov. 5 titled “Start of the New School Year in the Shade of the Islamic Caliphate,” featuring pictures of smiling Nineveh schoolchildren. There were also pictures of university students—all men—looking serious in a classroom. The caption

says, “He was true who said, Knowledge is light and ignorance is darkness.”

Time and again, says Cooley, it’s local managers who weaken the central organization by taking advantage of the lack of oversight to slack off or to create their own fiefdoms. Local managers “use the reputation and resources of the principal to start running their own either sort of self-interested schemes, or, in the extreme, corrupt schemes, but also just running side projects,” he says.

Al-Baghdadi was incorrectly reported killed following U.S.-led airstrikes on Nov. 8. His death would have been a setback for Islamic State, but the effectiveness of its management model makes clear how challenging it will be to reverse the group’s gains solely by killing al-Baghdadi or other central leaders. The very nature of such a group makes it harder to attack from the top down, says Cooley. “When these functions get reproduced locally, chapter by chapter, then they almost become modular in their nature and substitutable,” he says. Local pressure across all areas of its operations seems critical. The first U.S. military advisers to enter Anbar landed on Nov. 10 at a military base about 35 miles west of Hit, as Iraqi forces started sweeping villages just outside the city. The area is strategically vital. It opens a western corridor into Baghdad. The U.S. personnel are determining whether they should run a training operation from the nearby base. Even if they do, it might take months, if not years, to bring Iraqi forces to the point where they can reverse Islamic State’s progress in Anbar, if they can at all.

Another trove of captured Islamic State of Iraq documents, these from a northern Iraqi town called Sinjar, included a “lessons-learned” report about its decline before its resurgence following the outbreak of the Syrian civil war. The authors, unidentified fighters, complained that there were far too many local bureaucratic leaders, who were known as “emirs.” “The number of Emirs increased, and every specialty began having its own Emir, such as the Emir of Mortars, Emir of Administration, Emir of Booby Trap, Emir of Support, Emir of Gas, Emir of Tents, Emir of Kitchen,” it said, until they all smothered the “reverence from the hearts of the brothers toward their Emirs.”

—With Nadeem Hamid

The M-Form Style

A multidivisional organization that groups complementary activities into self-contained, flexible, and innovative units

