Dunia Finance LLC

Analytics function has been a true franchise builder for Dunia since our launch, driving targeted cross-sell by focusing on all three Rs of consumer banking: risk, revenue, response.

—Ali Hurbas

Introduction

Ali Hurbas, head of the Strategic Analytics Unit (SAU) at Dunia Finance LLC (Dunia), the Abu Dhabi-based financial services company, was in an emergency meeting in Dunia's Dubai office with Rajeev Kakar and his management team in early October 2012. Kakar, executive director and founding CEO of Dunia and, concurrently, executive vice president and regional CEO for central and eastern Europe, the Middle East, and Africa for Fullerton Financial Holdings, was a veteran of the banking industry, with more than 25 years of experience in multiple markets as regional head and CEO for Citibank's Turkey, Middle East, Pakistan, and Africa consumer businesses. With investor pressure growing, Kakar told his management team, "We are facing a severe challenge. We need to quickly increase volumes and reward our good customers. And there is a need for speed to get this done!" He had put together a SWAT team, led by Hurbas, to perform this critical task of doubling business growth. (Exhibit 2-1 lists all members of the Dunia teams mentioned in the case.)

Hurbas had spent most of his career analyzing customers around the globe, so he knew there was a fine line between pitching new products to customers and alienating them. Given his experience, Hurbas appreciated Dunia's approach to marketing products: cross-selling. Executives believed their cross-selling framework had helped the organization launch into the center of the competitive Emirati financial services

industry in 2008 and turn a profit by 2011—an event made even more notable for its occurrence during the global financial crisis. Just as Dunia was starting out, many others, due to involvement in debt-fueled real estate investments, were crumbling.

Working closely with his team, Hurbas had to figure out how analytics could be leveraged. Did it make sense to focus on bringing in new customers, or would ramping up cross-selling efforts to existing customers offer the volume Kakar needed to satisfy investors?

Dunia: Into the World

As Lehman Brothers, the U.S.-based financial services company, collapsed in the fall of 2008, another financial services firm called Dunia¹ launched nearly 11,000 km (~7,000 miles) away. Dunia started as a joint venture between Singapore-based Fullerton Financial Holdings (a wholly owned subsidiary of Temasek Holdings in Singapore), Abu Dhabi's Mubadala Development Company, and Waha Capital. The new firm's business model focused on offering financial services to underserved clients in four customer segments: mass affluent market, affluent customers, mass self-employed clients, and mass salaried customers in small and midsize markets. Customer needs drove product offerings (see Table 2-1 for sub-brands and Exhibit 2-2 for market segment percentage).

 Table 2-1
 Dunia Sub-Brands and United Arab Emirate (UAE) Banking Population

Sub-Brand	Customer Segment	% of Total UAE Banking Population
Duniamoney	Salaried mass market	40%
Dunia	Mass affluent	30%
Duniagold	Affluent	15%
Duniatrade	Self-employed mass market	15%

Source: Dunia. Used with permission.

Springing to life in the midst of a global financial meltdown seemed to motivate Dunia executives to create opportunity from crisis. As other financial firms reduced employee numbers, Dunia hired; as others closed branches, Dunia opened offices; as others drew back lending, Dunia sensibly grew.

At its core, Dunia did seem different. The diversity of its staff—25 nationalities and 31 languages represented, with many employees who had worked outside their

respective home countries' banks for extended periods—seemed to promise that Dunia would be more mindful where other institutions had made mistakes. Indeed, Dunia promised a measured approach, with a focus on basic values and sustainable business practices. It would be customer-centric, only without the excessive risk-taking that seemed to have brought about the 2008 economic meltdown.

As the world's financial structures continued to change and geopolitical events—the tsunami and nuclear reactor crisis in Fukushima, Japan, and the Arab Spring—continued to shape its environment, Dunia became profitable within 30 months. That accomplishment, among others, had Dunia leaders convinced that their business model was working. By 2012, the company had 800 employees, 19 branches, a 24-hour call center, and a sophisticated online service (see Exhibit 2-3 for financials).

Dunia: How Its World Worked

The UAE, a confederation of seven emirates, ² had one of the most developed and technologically efficient banking sectors in the Middle East.³ An increase in population (roughly 5.5 million) and high wealth levels had created much demand for financial services, so by 2012, the country was heavily banked; there were 24 local and 28 foreign banks with full operating licenses and 70 other financial institutions.⁴

The Central Bank of the United Arab Emirates (Central Bank), created in the 1980s to license companies for investment and specialized financing activities, also worked with the UAE government to set policies and act as a supervisor. Although the Central Bank did not have a federal credit bureau, there was a separate independent credit bureau called Emcredit based out of the Dubai International Financial Center (DIFC), which was founded in January 2006. The extent to which banks shared customer credit information with the central credit database (which stored an individual's negative and positive credit history) was unclear. Emcredit had another product called Embounce. The source of Embounce data was not individual banks but public prosecution in Dubai. As a criminal offense, any bounced check reported to police was recorded and submitted to Embounce. The database covered 100% of Dubai's population, but the data only included infractions, so it was not as rich as Emcredit's credit database. Moreover, check-bounce information of emirates other than Dubai (such as Abu Dhabi) was not included.

The Central Bank licensed Dunia to offer credit cards, personal and auto loans, simple insurance products linked to all of these, and corporate deposit services and financial guarantees for companies. In 2009, a new government policy offered Dunia

another market opportunity: the Wage Protection System. This government regulatory system required private-sector employers to pay wages monthly through approved financial institutions. After gaining government approval, Dunia signed up companies to facilitate these transactions. "Liquidity is key to the success of any financial institution," Venu Parameshwar, Dunia CFO, said. "One of Dunia's key priorities is to ensure that our balance sheet reflects the highest degree of liquidity."

Revenue was generated through fees from originating and servicing loans, commissions, interest on credit card and loan balances, and services such as credit card protection plans and loan insurance. Dunia needed customers who carried loans but did not default, or who maintained revolving credit card balances and still made a card payment each month. In addition, the longer Dunia held a customer, the more profitable the relationship became; therefore, ensuring customer loyalty was very important. In addition, the firm needed new customers to grow and had to spend more to keep the pool a healthy size. Hurbas described a few differences between the U.S. and UAE markets:

In a developing market like the UAE, there would be higher costs of doing business, including credit and operational cost. In the U.S., a company like ours could get 10 million names from the credit bureau and a half-percent response rate, with which you would be happy because it gives you about 30,000 or 40,000 customers. If you do that twice a month, that gives you pretty good numbers. Whereas over here, in a good month, we may still book a fraction of this kind of volume partly because UAE's population is far lower than the U.S.'s, and we don't have full-blown credit bureaus, so you can't say, "I want the customers with xyz criteria" and know exactly what type of risk you are taking. You have to rely on internal data in a developing market in order to grow prudently, which is a bigger risk challenge. Moreover, while UAE is a market full of growth opportunities, we should also be cognizant of, and factor in, several macro event risks surrounding us. The Middle East is a region going through significant changes, which bring about many risks, as well.

Another difference between the U.S. and a developing market is the human capital required across all functions, not only in strategic analytics. A manager in a large U.S. bank typically controls a much narrower area but can afford to dig far deeper, so can be a true specialist within his/her function. On the other hand, a developing market banking associate must have broader coverage in his/her function and also needs to have a strong understanding of several other functions in order to be effective.

Another variable that increased the risk lenders faced in the UAE was its transient, expatriate work force population. When non-nationals lost their jobs, their

residence visas were canceled and they had to leave the country within 30 days; by leaving the UAE for their home countries, customers could run out on loan and credit card payments, leaving banks with large credit losses. Raman Krishnan, the chief risk officer, had a tough job ensuring that the right credit policies were put in place and were dynamically assessed based on portfolio experience and market conditions. He worked closely with Hurbas to analyze the portfolio and make certain that the right metrics were in place for managing risk and reward simultaneously. Raman Krishnan explained, "Data is our most important tool in risk management. In an environment where risks are plenty, not having accurate data could lead to significant financial losses, while understanding and using data could give us a significant competitive edge."

New Customers and a Dunia Credit Bureau of Sorts

Each new customer was assigned a Dunia customer identification number (CIN) when onboarded. In the UAE, there was no identification number comparable to a U.S. Social Security number that could be used to gather data on each person. The government had introduced an Emirates ID number, but it was still a relatively new concept in 2012. The lack of a viable credit bureau put pressure on Dunia executives to generate their own reliable statistics to help them quantify decisions on product offerings and customer value. The data to generate these statistics were kept in Dunia's data warehouse (DWH). This included static demographic data (such as age and income) captured at the time of acquisition and performance data, which was refreshed dynamically.

Each customer's CIN would be the same on all products he or she purchased, thus providing Dunia with reliable and consistent customer data. Accurate data was the key ingredient for Dunia's "customer-centric" approach. Customer centricity was at the core of Dunia. The entire organization was structured around fulfilling the needs of the customer. Processes, people, and business functions were designed with each customer segment in mind. In contrast to a product-centric approach, Dunia's customer-centric approach identified the various life stage and lifestyle needs of the customer and aimed to fulfill them using customized financial solutions. Once a customer demonstrated acceptable usage patterns and history, Dunia would consider increasing the credit granted to the customer.

All behavioral and demographic data available were captured, addressing the five Cs of credit (capacity, character, capital, collateral, and covenant) and collected within the DWH. The DWH was a multipurpose database that captured all categories of data

from Dunia's several systems. These individual systems running at Dunia were chosen or designed with painstaking detail by the IT team. The DWH was completely homegrown by the Strategic Analytics Unit team and a key tool in its business. The various IT systems from front and back offices—including customer relationship management (CRM), the application processing system, the loan system, the credit card system, and the collection system—fed data into the DWH daily. As part of each system's batch update process, daily output files were produced and stored in the DWH. As a management information system (MIS), the DWH was used for list management, business analytics, statistical scoring, propensity modeling, test-versus-control design and tracking, business KPI generation, sales productivity analysis, incentive management, and limit increases.

New Customer Acquisition

As in most consumer-lending organizations, portfolio growth was driven by a combination of "new-to-bank" customer acquisitions (direct sales—led) and deepening relationships through cross-selling. The majority of new customers were gained through door-to-door sales, a model similar to the one insurance agents or financial planners used in the United States when they invited people to meet at a coffee shop or office for an information session. Several departments worked together to ensure that the right strategy was put in place for new-to-bank customer acquisitions. The team managed a very sizable group of relationship managers whose core focus was acquiring new customers.

The cost structure for booking a new loan, credit card, or insurance policy depended on the channel used to gain the business. There was a one-time booking cost for each customer. If the service was booked through a relationship officer in a Dunia branch or through a door-to-door sale by one of Dunia's 1,000 salespeople, the cost included a salesperson incentive of AED (United Arab Emirates dirhams) 400 (in U.S. dollars, USD 109); if booked through the call center, the incentive decreased by half, to AED 200 (USD 55).⁵ Table 2-2 shows the effect of adding additional call center agents to the 100 already in place. The profit per agent was AED 37,000. In addition to sales incentives, there were approval costs for the various stages of application processing, such as data entry, verification, underwriting, wages/salaries, and calling costs. That figure was approximately AED 100 (USD 27) per transaction. If the booked product was a credit card, additional costs included card embossing, printing, and production, and the accompanying letter and card carrier, which totaled AED 50 (USD 14). The cost for courier delivery was another AED 50. Booking loans was

less costly and had a higher probability of being collected. The UAE had a dim view of borrowers who failed to pay back loans—bouncing a check could result in a prison sentence. At Dunia, borrowers were required to provide postdated checks for each monthly installment at the time the loan was obtained.

Table 2-2 Call Center Capacity

Number of Call Agents Added	Number of Calls per Day	Employee Cost	Space
1–25	100 each	AED 6,000 per agent	35 sq. ft./agent
26+	100 each	AED 3,000 per agent	120/sq. ft./year

Source: Dunia. Used with permission.

For a product to succeed, the deciding factor was profitability. The focus on profitability was one of the leading-edge practices adopted by the Dunia SAU team, ensuring that a holistic assessment was done on the relationship's overall value, rather than on one-dimensional metrics. The profit and loss statement incorporated all relevant revenue and expense items associated with the product. Dunia measured ROA on an annualized basis.

The Strategic Analytics Unit and Customer Retention

Dunia was active in customer reward and progression and relationship deepening with activities such as credit card limit increases and cross-selling of other financial products. The cross-selling approach was used for existing customers and was similar to the frequently heard "Would you like fries with that?" at fast-food restaurants in the United States. Essentially, cross-selling was the strategy of selling multiple products to existing customers so that their balances (and Dunia's earnings) increased. The strategy was beneficial in two ways: The opportunity to cross-sell increased the lifetime value of the customer, and known customers were less risky because Dunia had data on their behavior. The Dunia system was set up to identify customers it could generate a profit from yet be nimble enough to take appropriate corrective actions if actual performance varied from expectations. Overall, cross-selling was less risky than acquiring new customers, required less investment to maintain, and increased probability of customer retention.

From a risk management perspective, determining which customers were eligible for cross-selling was the credit department's responsibility; once customers were cleared by that group, SAU could target them. SAU had the technical tools and historical performance, and DWH could therefore perform robust targeting.

To facilitate this approach, strong analytical capabilities were required in the form of three key elements: people, system infrastructure/technical tools, and accurate data. Dunia SAU scored high on all three counts.

Hurbas reported to Kakar (see Exhibit 2-4), ensuring independence of the critical analytics function. In most other banks and financial institutions, analytics would be a part of the credit function and called "Credit MIS," or would exist partly within marketing, finance, or IT. All analytics team members who dealt with data were gathered under one roof at Dunia, ensuring not only a single source of data—or "source of truth"—but also a broad exposure to the same team of people who handled data across all aspects of the business, as opposed to preparing reports on a one-dimensional basis within a narrow focus on a single functional area. Kakar and the rest of Dunia's senior management were the biggest supporters of analytics and promoted a culture of analytics-based decision-making throughout the organization, making analytics a part of Dunia's DNA.

To ensure that the SAU stayed sharp, Hurbas hired the team carefully. He looked for individuals who were either fresh from top schools around the world or who only had a few years' experience—always with a strong programming foundation and quantitative abilities—who also demonstrated in-depth business, financial, product, and process understanding. Because individuals bearing all of those skills were scarce, talent was incubated through senior-level, cross-functional interaction with many other departments, where training cut across various disciplines, such as finance, marketing, operations, IT, and sales.

Nesimi Monur, an industrial engineer, was Hurbas's first hire. Gauri Sawant and Ram Naveen joined the SAU team later on with IT and consumer finance backgrounds, respectively. More recently, Hurbas hired Maksym Gadomsky, who had an applied mathematics degree; Cagatay Dagistan, who had a master's in industrial engineering; and Sahil Kumar, a computer engineer with an MBA. This diverse and eclectic team helped bring added breadth, which made analytics-based decision-making more meaningful.

Parallel to Dunia's growth, the analytics function, which was one of the firm's key growth engines, was expanding. By 2012, the core SAU team was seasoned, scalable, and ready to take on more people and train them on the analytics tools and techniques, as well as on the business processes such as cross-selling.

Any customer who had previously opted out of all promotional offers was excluded from cross-sell efforts. For each product, a list of eligible customers would be extracted using behavioral criteria (for example, past delinquency incidence). Pricing and loan quantum would also be driven by SAU segmentation.

Credit card usage patterns, for example, provided a wealth of information. Every instance of a customer's credit card swipe could provide valuable insights about the customer's lifestyle and life stage and offer pointers for understanding customer needs and preferences. That way, Dunia could tailor appropriate products to meet these needs and preferences, in line with the principle of customer centricity. Dunia SAU was instrumental in taking this volume of data and extracting meaningful intelligence about the client. Dunia could offer solutions for problems customers did not know they had (for example, a new home loan may coincide with moving expenses, a hotel stay, or household furnishing purchases).

The process of contacting customers was a strategic decision, and each combination carried a different cost (Table 2-3). Efforts were made to maximize the customer response, yet Dunia was mindful not to contact a customer too frequently. Telesales calls did not exceed three per customer. SAU would give the validated list to call center agents for action.

Table 2-3 Channel Choice Cost Sample

Channel Choice	Cost (UAE Dirhams)	Cost (U.S. Dollars)
E-mail only	0	0
E-mail + 1 call	0.75	0.20
E-mail + 2 calls	1.50	0.40
E-mail + 3 calls	2.25	0.61

Source: Dunia. Used with permission.

Booking a Cross-Sell

Regardless of the cross-sell product, the front-end channel would initiate a cross-sell offer action through CRM. An offer action included electronic mailers specifying the loan or credit card amounts being sent to customers through the centralized marketing team and outbound telephone calls from the call center.

The company relied heavily on Dunia's outbound telesales team to contact eligible customers and ensure cross-sell would happen. While the outbound team ensured that call-out would happen, the marketing and product team ensured that customer communications were sent out via all channels (such as e-mail, text message, and direct mail) for the broadest reach possible. The process worked seamlessly across all units—SAU, credit, outbound calling, marketing, and operations. The analytics team played a pivotal role in ensuring well-orchestrated coordination across all involved units. This called for significant soft skills over and above the technical skills expected of analytics.

Customer responses were recorded in the CRM database, and if the customer was uninterested, the reasons for the rejection would be recorded. If the customer was interested, the new product application was created and the transaction booked. The operations team was responsible for processing applications in a cost- and time-efficient manner.

If a service such as a loan or credit card was accepted, the SAU would immediately and rigorously start tracking for delinquencies; those results would be incorporated into the criteria, and the credit and SAU departments would review results. The SAU engaged with all of Dunia's functional units and was empowered to make decisions and implement them. Cross-sell response results would be used to develop new models for predicting propensity to respond to similar future offers, and risk results were used to model and recalibrate existing behavior scores and other rule-based criteria. "It is not just about quantitative techniques, but also business sense," Hurbas said. "One must know what to analyze depending on the problem at hand versus blindly repeating analyst reports at some frequency—then it becomes MIS and not analytics, which is really actionable MIS."

Cross-Selling and Growth Strategy

To meet this challenge, Hurbas thought he had to ensure the 10 Ps of successful analytics:

- People—Hire top-tier *people* with specialized talent.
- Passion—The team needs to display *passion* through creativity and innovation.
- Predictability—*Predictability* of results leads to profitability.
- Profitability—*Profitability* is required for investing in good times and sustainability in stressful times.

- Proactive—Be proactive in identifying potential issues.
- Precision—The solution needs to be executed with *precision*.
- Power—Computing power has to be at the highest degree. In this case, Kakar allowed Hurbas to make maximum necessary investment into systems and hardware.
- Partnership—Partnership across all functional teams is a critical success factor.
- Progression—Customer progression has to be in line with their needs and life stage.
- Pragmatism—The solution has to be *pragmatic* for simplicity of implementation.

To form the right partnerships, Hurbas worked closely with Mariam El Samny, head of marketing and products; Barlas Balabaner, operations and technology director; Guru Balakrishna, credit policy head; Raed Shomali, contact center head; Muzaffer Hamid, operations head; Pankaj Kundra, segment distribution head; Sanjay Kao, consumer business head; Shankar Balasubramania, collections head; Venu Parameshwar, CFO; and Raman Krishnan, chief risk officer. Dunia believed that without crossfunctional participation, the best solutions would fail.

There would be no sitting still in the UAE market for Dunia. In the emergency meeting, Hurbas heard loud and clear that the CEO wanted volumes increased. Hurbas was keenly aware that success relied on new ways of thinking. He believed the firm's cross-sell model offered a competitive edge, but he wondered whether Dunia should explore providing credit cards to personal loan customers. Or would increasing efforts to gain new customers be a better plan? In either event, would the company need to double the size of its call center?

Endnotes

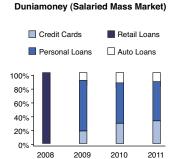
- Dunia is Arabic for world, in particular the earthly world, distinct from the spiritual world or hereafter. Several other languages have retained the word and at least part of its meaning, including Bengali, Hindi, Persian, Punjabi, Turkish, and Urdu.
- What distinguishes an emirate from other territorial units is its governance by a hereditary ruling class.
- 3. Economist Intelligence Unit, "United Arab Emirates: Financial Services Industry Report," June 2010, 9.
- Banks were licensed to accept individual depositors, but financial institutions could only accept deposits from corporations.
- 5. All exchange rates are approximate.

Exhibits

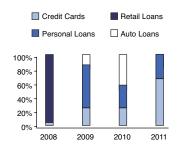
Exhibit 2-1 Dunia Finance LLC: Teams

Strategic Analytics Team	
Ali Hurbas	Head, Strategic Analytics
Nesimi Monur	Industrial engineering background and Hurbas's first hire
Ram Naveen	Finance background
Gauri Sawant	IT background
Maksym Gadomsky	Applied mathematics degree
Cagatay Dagistan	Master's in industrial engineering
Sahil Kumar	Computer engineering and MBA background
Technology Team	
Nihad Nazir	IT Solutions Head
Sameer Tomar	IT Systems Manager
Marketing Team	
Mariam El Samny	Marketing and Products Head
Mohan Prasannakumar	Asset Products Head
Credit and Collections Tean	n
Raman Krishnan	Chief Risk Officer
Guru Balakrishna	Credit Policy Head
Shankar Balasubramania	Collections Head
New Customer Acquisition	Геат
Sanjay Kao	Consumer Business Head
Neeraj Sehgal	Sales Head, Abu Dhabi
Pankaj Kundra	Segment Distribution Head
Sunil Mathews	Segment Head, Self-Employed Mass Market
Rishi Tandon	Segment Head, Dunia Gold (Affluent)
Operations Team	
Barlas Balabaner	Operations and Technology Director
Muzaffer Hamid	Operations Head
Owais Qazi	Unit Head, Credit Operations
Rajat Srivastav	Unit Head, Operations
Vinod Thomas	Unit Head, Operations
Raed Shomali	Contact Center Head

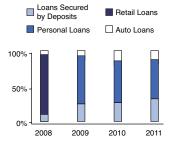
Source: Dunia. Used with permission.



Duniatrade (Self-Employed Mass Market)







Duniagold and Others (Affluent Market)

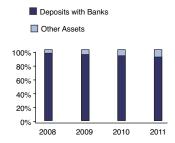


Exhibit 2-2 Dunia Finance LLC: Monies lent by market segment in the United Arab Emirates (2008–2011)

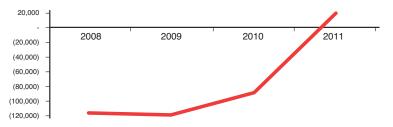
Data source: Dunia annual reports, 2008-2012.

Exhibit 2-3 Dunia Finance LLC: Income Statements 2008–2011 (In Thousands of UAE Dirhams)

	Nov. 1, 2006 to Dec. 31, 2008	Twelve Months Ended Dec. 31, 2009	Twelve Months Ended Dec. 31, 2010	Twelve Months Ended Dec. 31, 2011
Interest income	5,956	39,131	86,282	153,397
Interest expense	(54)	(1,227)	(3,386)	(12,728)
Net interest income	5,902	37,904	82,896	140,669
Commission and fee income	62	7,176	23,152	64,811
Other operating income	194	554	-	-
Operating income	6,158	45,634	106,048	205,480
Impairment charge, net	(336)	(25,482)	(42,174)	(54,310)

	Nov. 1, 2006 to Dec. 31, 2008	Twelve Months Ended Dec. 31, 2009	Twelve Months Ended Dec. 31, 2010	Twelve Months Ended Dec. 31, 2011
General and administrative expenses	(115,046)	(123,040)	(140,057)	(125,655)
Amortization and depreciation	(5,037)	(13,594)	(11,641)	(7,398)
Net Profit (Loss)	(114,261)	(116,482)	(87,824)	18,117
(In Thousands of	U.S. Dollars)			
	Nov. 1, 2006 to Dec. 31, 2008	Twelve Months Ended Dec. 31, 2009	Twelve Months Ended Dec. 31, 2010	Twelve Months Ended Dec. 31, 2011
Interest income	1,621	10,651	23,486	41,755
Interest expense	(15)	(334)	(922)	(3,465)
Net interest income	1,606	10,317	22,564	38,290
Commission and fee income	17	1,953	6,302	17,642
Other operating income	53	151	-	-
Operating income	1,676	12,422	28,866	55,932
Impairment charge, net	(91)	(6,936)	(11,480)	(14,783)
General and administrative expenses	(31,304)	(33,491)	(38,124)	(34,203)
Amortization and depreciation	(1,371)	(3,700)	(3,169)	(2,014)
Net Profit (Loss)	(31,090)	(31,706)	(23,906)	4,931

Net Income (In Thousands of UAE Dirhams)



Source: Dunia directors' reports, 2008–2012.

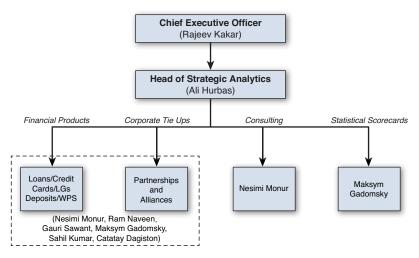


Exhibit 2-4 Dunia Finance LLC: SAU organizational chart

Source: Dunia company documents. Used with permission.

Assignment Questions

- 1. What are the differences in banking between the United States and the UAE?
- 2. How does analytics affect customer relationship management at Dunia?
- 3. How would Dunia affect customer lifetime value?
- 4. Is it the right time for Hurbas to focus on cross-selling or should he focus on new customer acquisition?