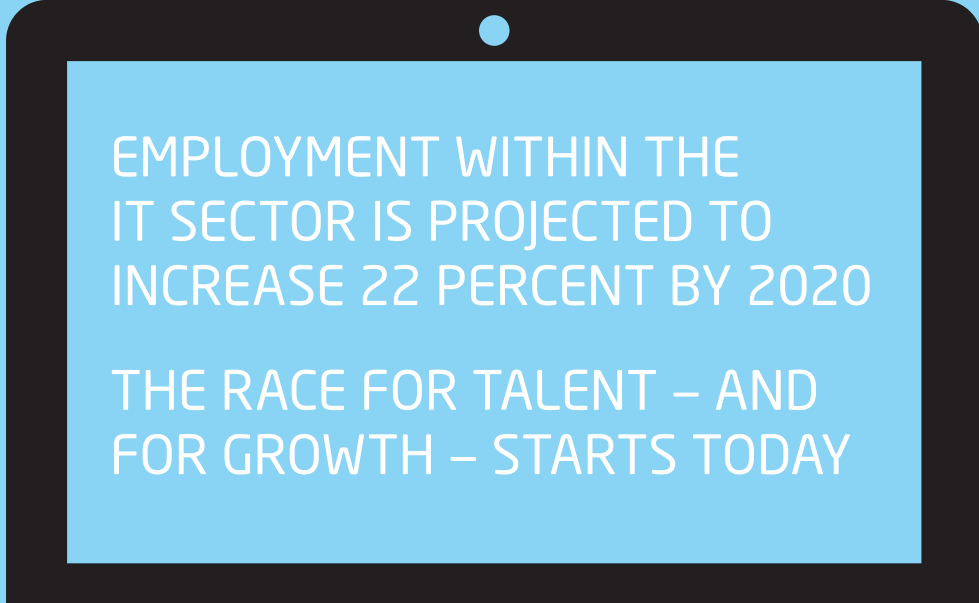# THE 2014 TECH TRENDS FORECAST

MODIS

THE FUTURE OF TECHNOLOGY IS TAKING SHAPE RIGHT NOW

Today's shifts in consumer habits, business processes, federal regulations and the overall state of the economy are dictating which technologies will be essential tomorrow.

At the same time, the future of the IT workforce is taking shape as well. In order to capitalize on these emerging and growing technologies, companies are targeting candidates with not only the right skills and experience to fill a role, but also the creativity, leadership and vision necessary to grow into new roles while helping their businesses grow over the long-term.

So what are these trends, and what types of professionals do you need to take advantage of them?

Read on to find out.

EMPLOYMENT WITHIN THE IT SECTOR IS PROJECTED TO INCREASE 22 PERCENT BY 2020

THE RACE FOR TALENT – AND FOR GROWTH – STARTS TODAY

THE EXPANSION OF MOBILE STRATEGY AND APPLICATIONS

Less than a decade ago, the only "apps" cell phones possessed were calculators, email and messaging clients and a handful of eight-bit games. Today, however, there are millions of apps available, and they define the mobile experience for most users. In fact, apps themselves represent a growing sub-sector within the mobile industry.

How It's Impacting Your Business

Your customers, clients and prospects are visiting your website from their phones during their morning commutes. They're engaging with your marketing campaigns while waiting to see their doctors and are browsing your content while working out at the gym. These are all opportunities to grow your business. However, if you do not have a well-defined strategy for mobile and app development, you are letting these opportunities pass you by.

Key Candidates To Capitalize On This Trend

Application & Software Engineers
These professionals, often part of a development team, create core technologies for building mobile products. They also customize user experiences, patch security flaws, keep programs running smoothly and lead the creation of new features. By investing in these positions, you can boost customer service, sales, marketing and advertising.

Skills to look for: A combination of programming and statistical skills, as mobile development relies heavily on consumer behavior.

Database Administrators and Analysts with Skills in the Cloud
These are your data systems commanders, and they can help you retrieve valuable user activity information and interpret it effectively.

Skills to look for: Quantitative analysis and geospatial skills to properly capture, retrieve and analyze the user data you need.

Business Data Analysts
Your success in mobile depends on your ability to attract and retain customers. If your apps aren't getting downloaded, then they're not generating businesses. These professionals leverage consumer data to assess the business landscape and identify opportunities for strengthening your market position.

Skills to look for: Sophisticated data skills to optimize customer experiences and engagement.

Data Architects and Software Engineers
Equal parts technical and analytical, research engineers can help you make sense of the millions of seemingly disconnected details of your mobile strategy and execution. They help synthesize data sources across platforms – desktop, mobile, tablets, etc. – to produce a consolidated view of the user experience and, more importantly, user satisfaction.

Skills to look for: Machine learning, programming and analytical capabilities to make sense of data.

Adding up the impact of apps
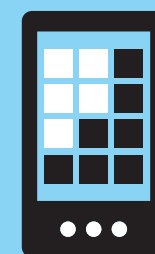
- 56 percent of American adults own a smartphone[1]
- Adults spend an average of 2+ hours using apps every day[2]
- The app industry has generated more than 500,000 jobs
- The app industry is worth $25 billion; by 2016, it will be worth $46 billion

1 http://www.pewinternet.org/Reports/2013/Smartphone-Ownership-2013.aspx
2 http://mobilefuture.org/newsroom/mobile-future-infographic-all-about-apps/

THE INCREASING PREVALENCE OF PREDICTIVE ANALYTICS

Companies spent more than $37 billion on digital advertising in 2012[3]. In 2013, that number is expected to climb by 17 percent.

How It's Impacting Your Business

Companies like Google, Yahoo!, Microsoft and Facebook make it possible to target consumers – or groups of consumers – on a highly personal level. But in order to make your consumer messaging effective, you need to understand consumer expectations. They want information, products, services and offers that make their lives easier; and they want it on-demand, tailored and right now.

Key Candidates To Capitalize On This Trend

Data Modeling Analysts
The success of online marketing relies on one key variable: the predicted probability of whether a user will respond favorably to your messaging, product or service. You need a solid data strategy that leverages your customers' information to make educated inferences about them.

Skills to look for: Machine learning and mathematical skills to transform this big data vision into a tangible reality.

Database Report Writers and Database Warehouse Analysts Online marketing campaigns are highly data-driven. That's why marketing teams need technical leaders who can synthesize consumer and product data into actionable business recommendations. These experts spend less time crunching numbers and more time analyzing, which means they function as the liaisons between creative, technical and revenue teams.

Skills to look for: Strong communication skills and analytic abilities to translate business data into actionable intelligence.

Business Intelligence Specialists: These experts help answer three critical questions – What happened? Why did it happen? What can you do better? They specialize in selecting the right tracking code and choosing the right systems to help make sense of numbers. Most importantly, they create automated reporting processes to deploy across teams.

Skills to look for: Strong communication and statistics skills to properly demonstrate predictive analytics capabilities and solutions.

THE DEMAND FOR BETTER SECURITY

Correcting cyber attacks cost U.S. companies an average of $8.9 million annually[4], and the size, scale and expenses associated with cyber attacks are increasing. The threat has become so prevalent that President Obama has identified cyber security as one of the most critical issues facing U.S. businesses and the U.S. as a whole.

How It's Impacting Your Business

No matter how big your company is or what industry you are a part of, you are at risk of a cyber attack. That means your data, and your customer's data, can be compromised at any time. A cyber attack can cost you more than just dollars – it can also cost you your reputation.

Key Candidates To Capitalize On This Trend

Data Security Managers
These experts design and maintain systems to keep unwanted users away. Data security managers balance technical and strategic aptitude to designing procedures for finding, tracking, and analyzing vulnerabilities.

Skills to look for: Creativity and leadership potential are necessary for this role. Analytical and technical skills paired with strong strategic planning are also essential.

Security Administrators
Security administrators are at the front lines of security. They're tasked with implementing and maintaining servers, planning for service outages and analyzing reporting logs. They also provide technical support to stakeholders and strive to ensure that systems are always up and running smoothly.

Skills to look for: Creativity and communication skills are invaluable to this role, as security solutions are complex and require significant customization.

Systems Security Analysts:
These professionals constantly monitor activity to identify potential risks. They need the ability to think on their feet, act quickly, discover, and report on findings in near real-time.

Skills to look for: A strong command of scripting programming languages and analytical skills to remain flexible and implement improvements.
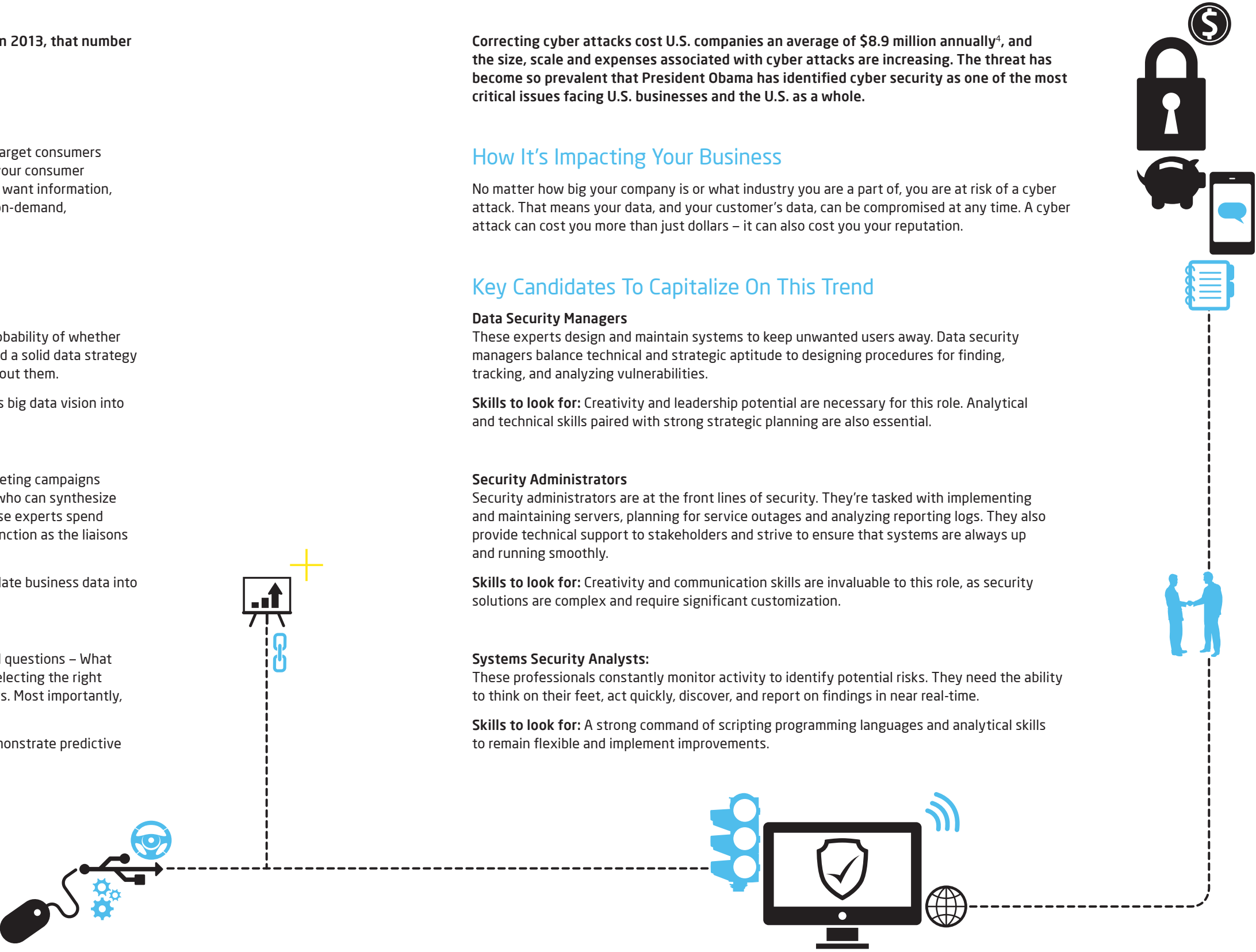
THE HEALTH IT EVOLUTION

Healthcare and IT – two of America's largest industries – are on a collision course. Thanks to regulations like the Health Information Technology for Economic and Clinical Health (HITECH) Act, organizations are investing in electronic health record (EHR) technologies to meet meaningful use standards. In addition, the Affordable Care Act will go into full effect in 2014, leading to the widespread use of online health insurance exchanges.

How It's Impacting Your Business

Experts predict the Health IT industry will reach $56.7 billion by 2017[5] . Whether you are in the industry or just supporting it, your IT department will be tasked with meeting the following objectives:

- Cost reductions
- Systems integrations
- Government compliance
- Elimination of medical errors

Key Candidates To Capitalize On This Trend

Clinical Systems Leaders
These professionals review, analyze and evaluate business systems to meet user needs. This is especially important for healthcare providers that are launching new EHR systems.

Skills to look for: A strong understanding of medical coding systems in addition to the complex IT systems that facilitate effective data storage and sharing.

Health Information Management Specialists
These specialists help medical organizations ensure that patient records are secure, HIPAA compliant and fulfilling cross-functional needs. These individuals serve as liaisons between information services, technology and business stakeholders.

Skills to look for: A strong balance of technical, procedural and partner-facing skills.

Revenue Analysts
In light of new meaningful use incentives and the Affordable Care Act, healthcare providers will need to maintain a clear picture of their finances. Revenue analysts direct and oversee the overall policies, objectives and initiatives of an organization's business development. That means reviewing, designing and implementing processes surrounding pricing, billing and third-party payer relationships. These experts help organizations remain as efficient as possible.

Skills to look for: Financial analytics and reporting skills to identify paths to improvement.

Emerging trends in mobile, predictive analytics, security and health IT are driving demand for professionals with the right mix of technical skills and business savvy, and this demand is intensifying by the day.

However, supply is not keeping up with demand. Despite persistently high unemployment rates for the general population, the IT industry faces a significant skills shortage. There are simply not enough qualified candidates to fill all the openings within this industry.

As a result, 2014 will be a cutthroat year for hiring managers and IT teams when it comes to attracting the best talent. Give yourself a head start by collaborating with your key stakeholders, identifying the main issues on your horizon and targeting your recruiting efforts to those candidates who can make an impact in 2014 and beyond.
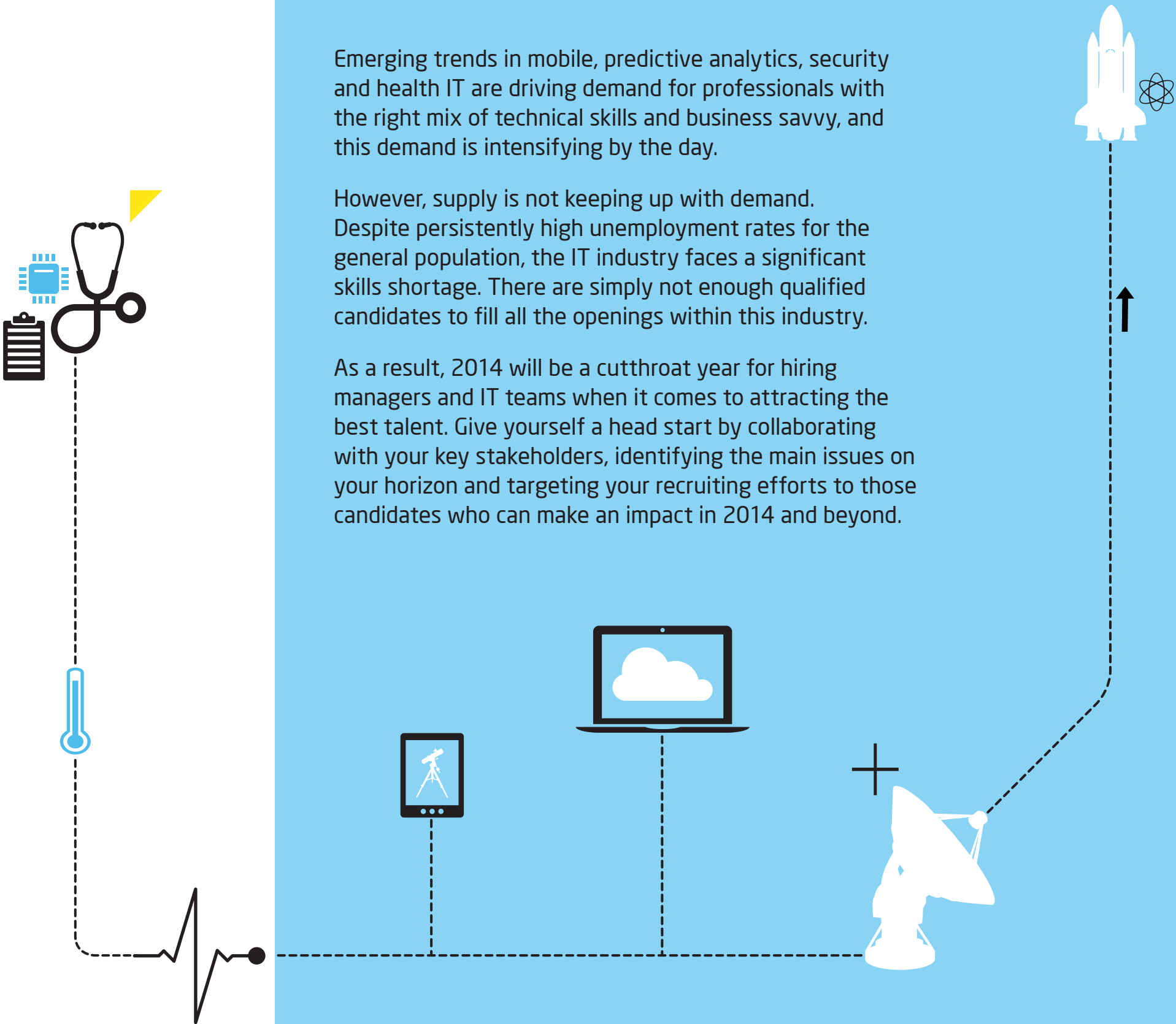
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