Greythorn
Specialist Technology Recruitment

INSIDE TECHNOLOGY MARKET REPORT 2014

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INTRODUCTION

At the end of 2013, we surveyed our database of IT professionals about their careers as well as the current job market conditions. These findings have enabled us to present you with a clear insight into key trends and drivers in the IT market.

This report provides some of the most comprehensive information available. We hope you find the data useful and we welcome any comments or recommendations.

We would also like to extend a big thank you to everyone who took part in the survey, your input is greatly appreciated.

Ben Weber, Managing Director
ben.weber@greythorn.com
+1 425 460 4285

METHODOLOGY

In Q4 2013, Greythorn conducted the third survey with its candidates focused on the demographics, length of tenure, working week, job security, career motivations, department changes, reward and bonus trends of IT professionals.

Professionals from Washington, the Bay Area and across the United States responded to the survey; helping us to determine key trends within the market for you.

This market report is based on the data received through the online survey, as well as the expert opinions of our experienced recruiters.

Please contact us if you would like to receive a report tailored to your business needs.

survey.us@greythorn.com
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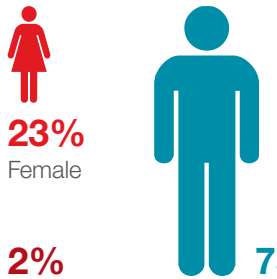
DEMOGRAPHICS

DEMOGRAPHICS

What is your gender?

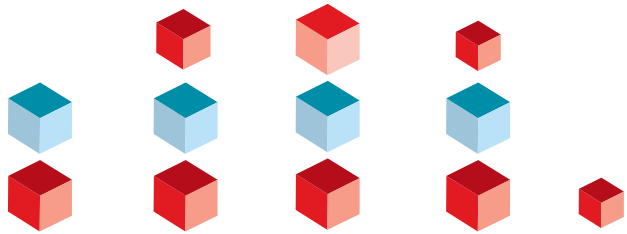


23% Female

2% Prefer not to say

75% Male

How old are you?



20% 25 - 34 years old

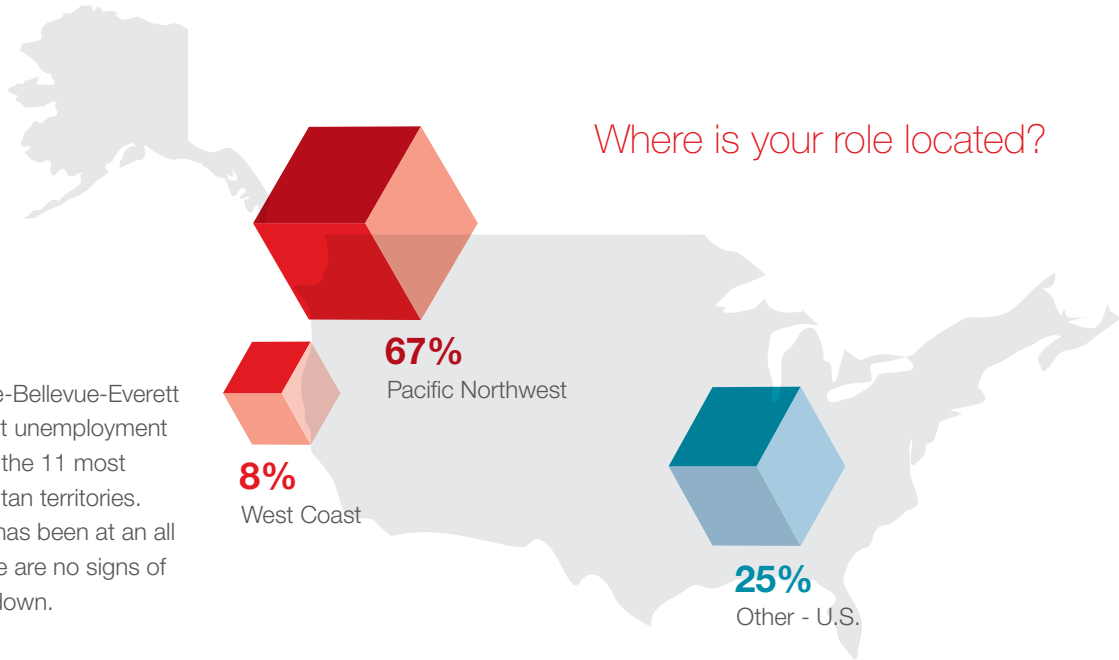
25% 35 - 42 years old

29% 43 - 50 years old

23% 51 - 60 years old

3% 60+ years old

Where is your role located?



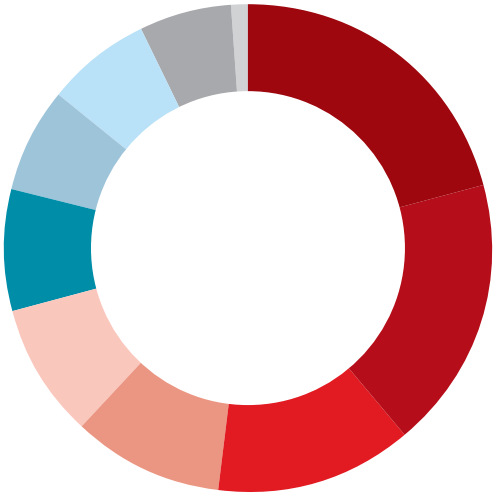
> In 2013, the Seattle-Bellevue-Everett area saw the lowest unemployment rate at 5.3% out of the 11 most populous metropolitan territories. Demand for talent has been at an all time high, and there are no signs of this trend slowing down.

Dan Colleran
Director, Technology Practice

Greythorn
Specialist Technology Recruitment

PROFESSION

Which of the following best describes your current position?



21% Software Development

18% Project Management & Business Analysis

12% Big Data/ Analytics

10% Cloud Computing

9% Information Security

7% Infrastructure

7% Web Development

6% Mobile Development

6% Leadership/ Executive

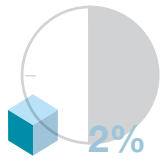
4% Other

Organizations are looking for engineers who are active in the tech space outside of their 9 to 5. Candidates who are involved in technical communities, contributing to Open Source, and take on outside projects show promise in being able to pick up on new processes, rather than being stuck in old scripting languages.

Maria Tannehill
Technical Recruiter

WORKING WEEK

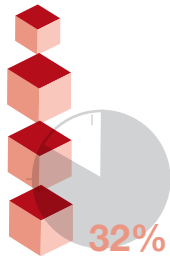
How many hours per week do you work on average?



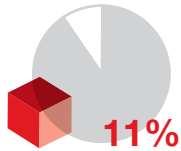
Fewer than 30 hours

31-40 hours

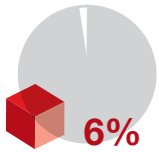
41-45 hours



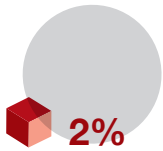
46-50 hours



51-55 hours



56-60 hours



More than 60 hours

MARKET PERSPECTIVE

MARKET PERSPECTIVE

STAFF

What is the size of the organization or team you work with?

17%
Fewer than 5 team members

28%
6 - 15 team members

11%
16 - 30 team members

44%
More than 31 team members

Companies of all sizes are grappling with the reality of ever-growing data sets. How to collect, store, manipulate and create visualizations of this data will be a high priority for all types of businesses in 2014.

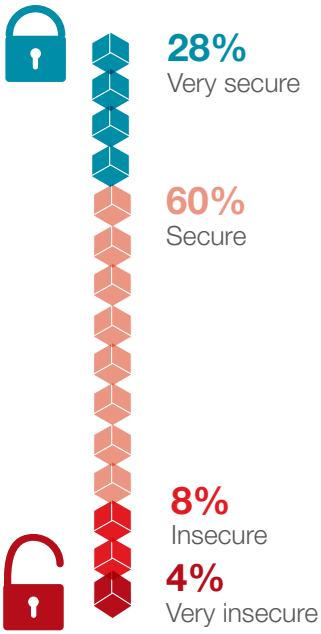
From startups to large companies, there's no slowing in lending or hiring in Seattle. The demand for A talent is quickly outstripping the supply and will continue to do so for the next several years.

Dan Colleran
Director, Technology Practice

Greythorn
Specialist Technology Recruitment

JOB SECURITY

How secure do you feel in your current role?



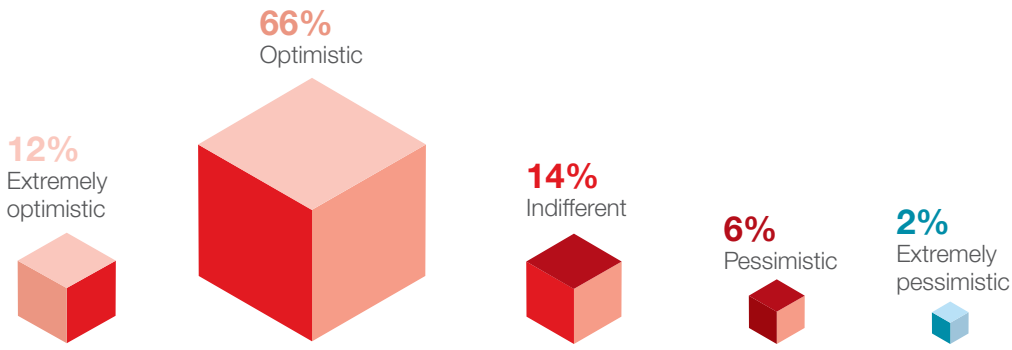
Global management consulting firm McKinsey & Co. believes big data analytics is one of the top five catalysts that can increase U.S. productivity and raise GDP over the next seven years. However, the firm also predicts that the U.S. could face a shortage of 140,000 to 190,000 people with “deep analytical talent” and of 1.5 million people capable of analyzing data in ways that enable business decisions by 2018.

The tech market right now is really unprecedented. Once we find a candidate, we have to give them a really intriguing offer. They often receive multiple offers from various companies throughout their job search process.

Dan Colleran
Director, Technology Practice

ECONOMY

How are you feeling about the future of the economy over the next 12 months?



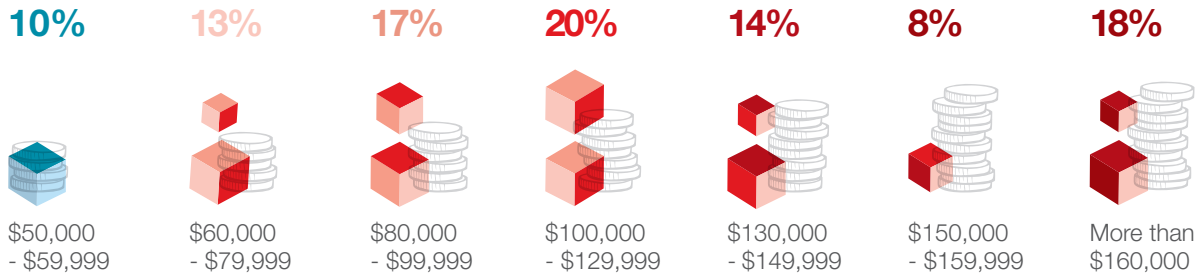
> Application Development is advancing at breakneck speed with new ideas and technologies introduced daily. The cost of sophisticated web applications has dropped dramatically with open source software and powerful tool sets and libraries no longer being available to the big boys. Concepts such as responsive design will allow us to bring our favorite applications with us via several mediums without missing a beat.
>
> Dan Colleran
> Director, Technology Practice

FULL TIME EMPLOYMENT

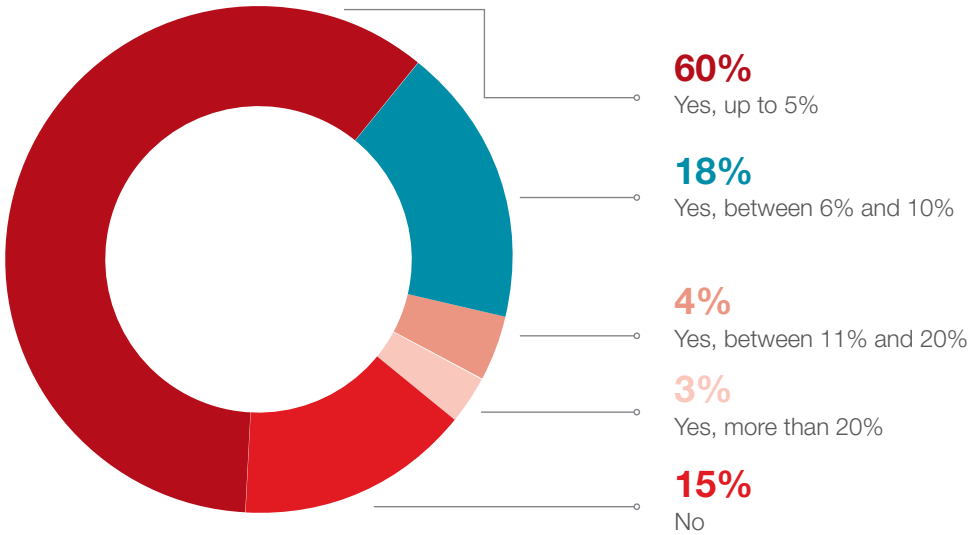
FULL TIME EMPLOYMENT

COMPENSATION

What level is your current base salary?



Would you expect a salary increase over the next 12 months in your current role?



LENGTH OF TENURE

How long have you been in your current role?

14%
0 - 6 months

12%
6 - 12 months

29%
1 - 3 years

15%
3 - 5 years

19%
6 - 10 years

11%
More than 10 years

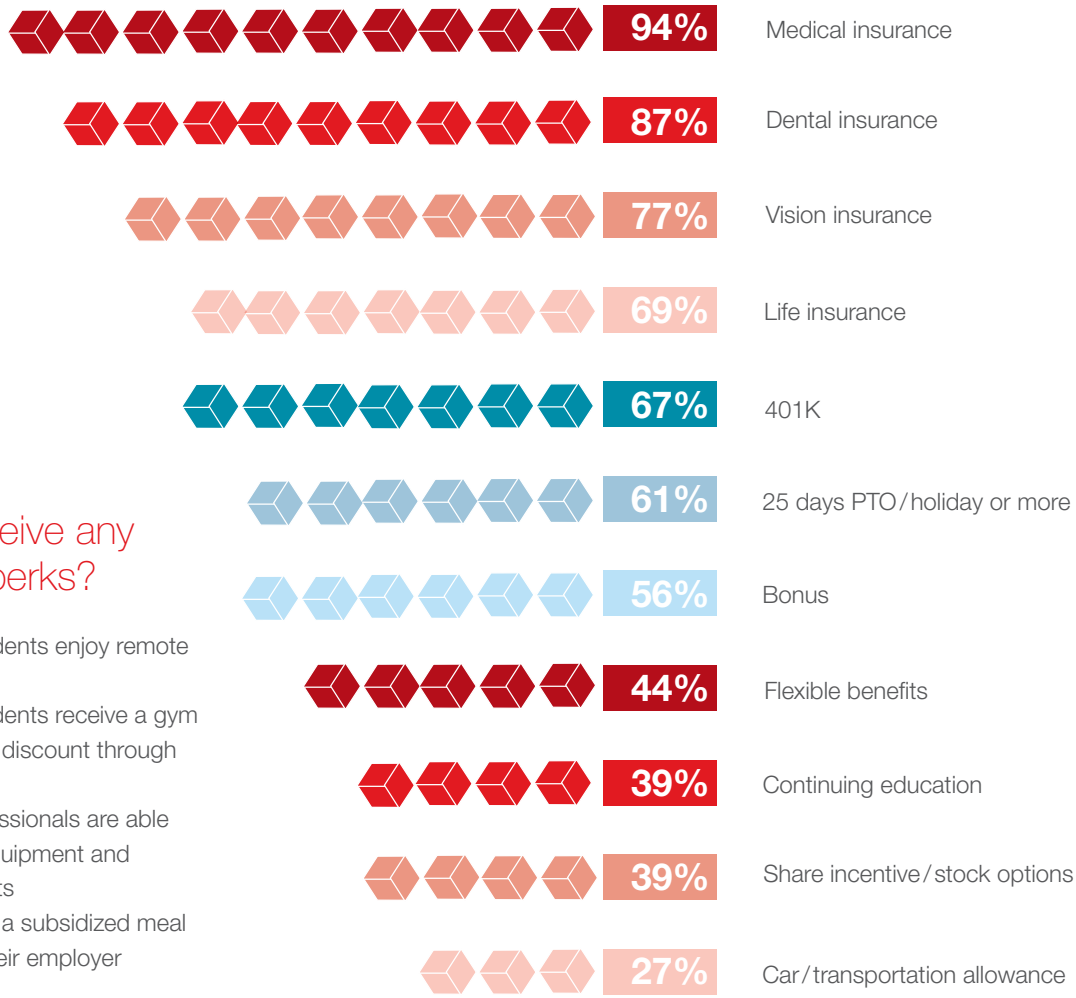
Companies will be seeking candidates with a mixed skill set as big data becomes more vital to business operations. Operations intelligence firm Vitria highlighted the growing profile of big data, citing that 41% of firms wished to be able to take action on data within seconds or minutes of gathering it.

With this shift in interest, we will see employers begin to train new engineers on the specific way the company works, in order to refine the multiple skill sets that will be needed in today's data-rich workplace.

Maria Tannehill
Technical Recruiter

FULL TIME EMPLOYMENT

BENEFITS



Do you receive any additional perks?

- 62% of respondents enjoy remote working
- 34% of respondents receive a gym membership or discount through their employer
- 22% of IT professionals are able to reimburse equipment and technology costs
- Only 12% have a subsidized meal plan through their employer

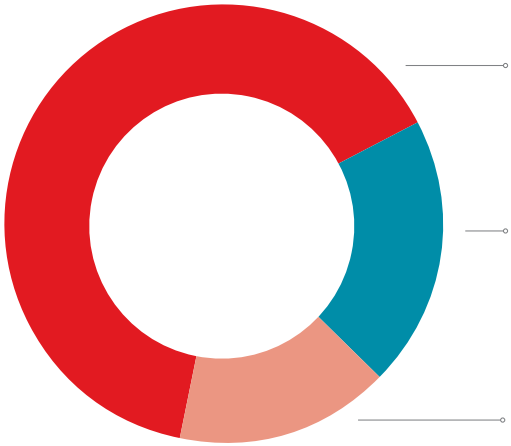
BONUS

Did you receive a bonus in 2013?

YES 53%

NO 47%

What is your bonus calculated on?



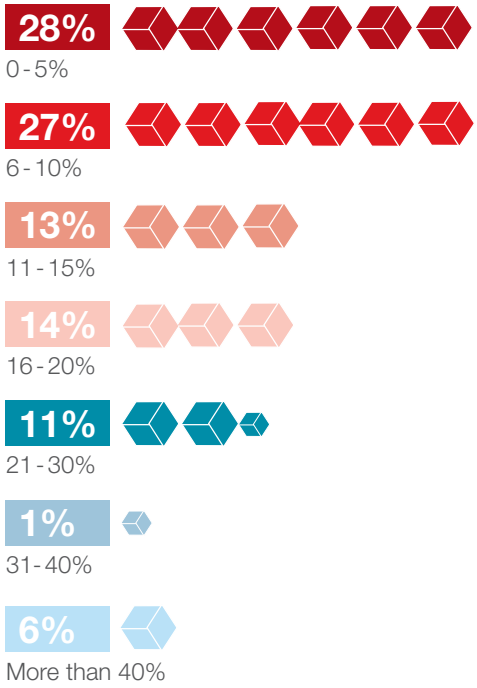
68%
Both company and personal performance

16%
Company performance

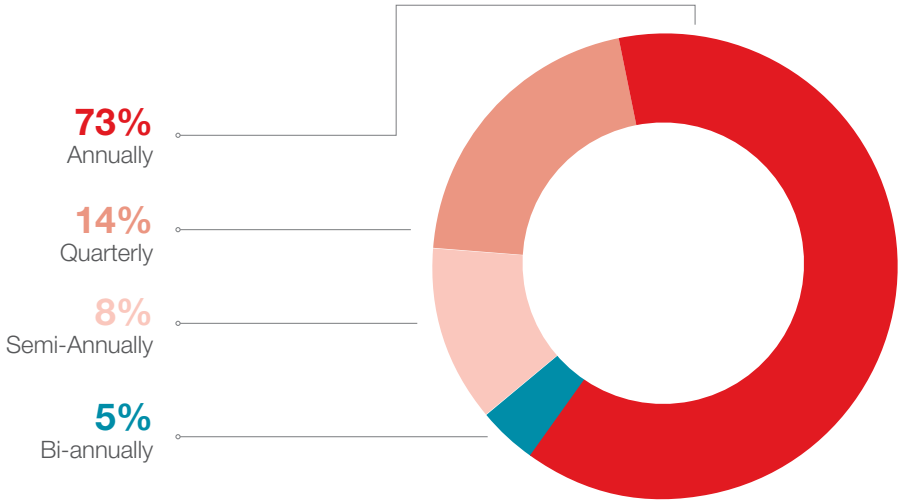
16%
Personal performance

FULL TIME EMPLOYMENT

As a percentage of your base salary, what level was your last annual bonus?



When is your bonus paid?

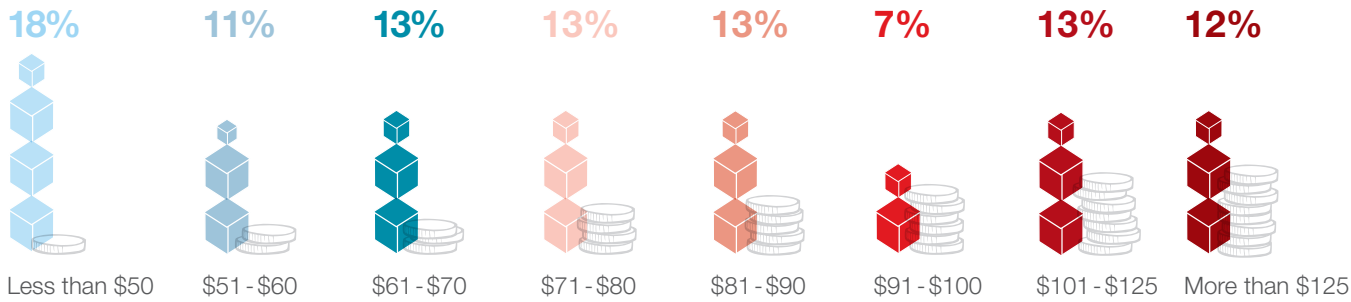


CONTRACT EMPLOYMENT

CONTRACT EMPLOYMENT

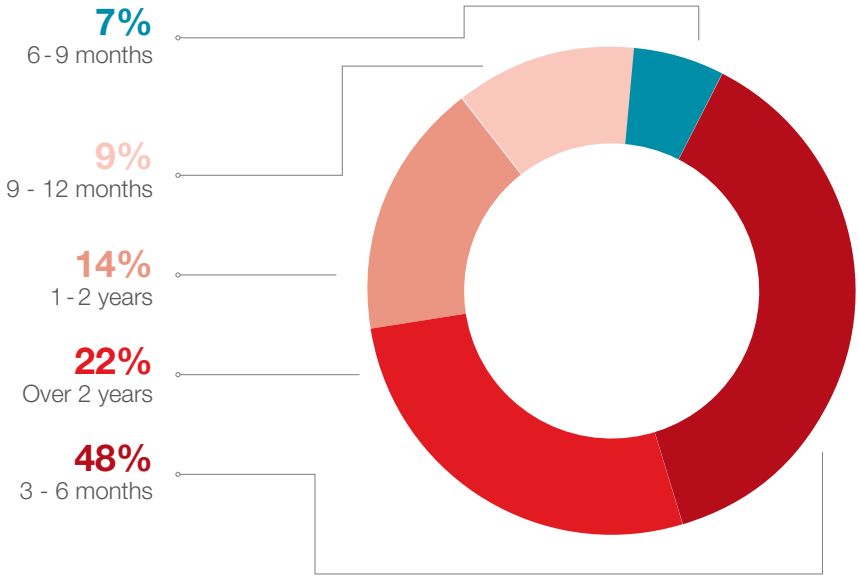
COMPENSATION

What level is your current hourly rate?



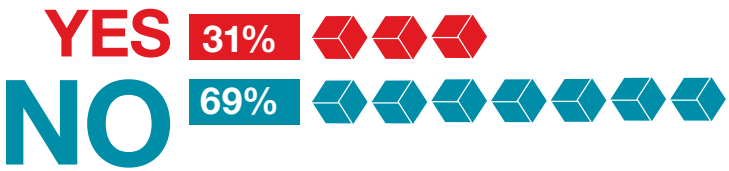
LENGTH OF TENURE

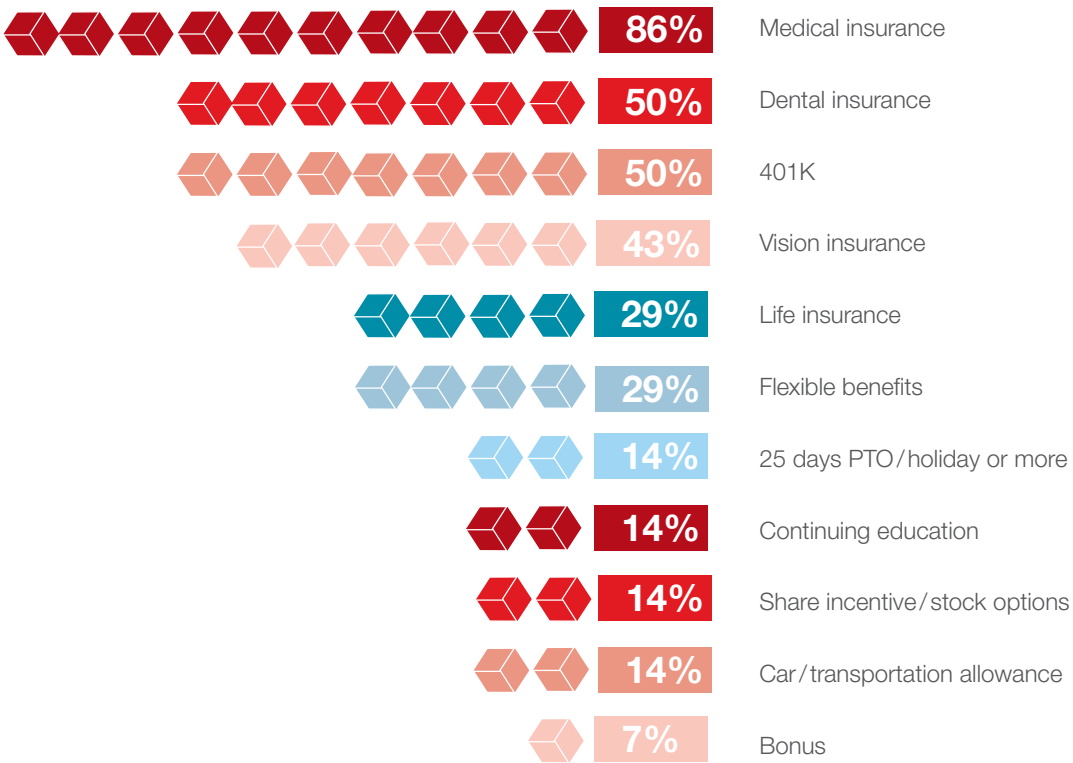
How long have you been in your current role?



BENEFITS

Do you receive benefits as part of your contract?

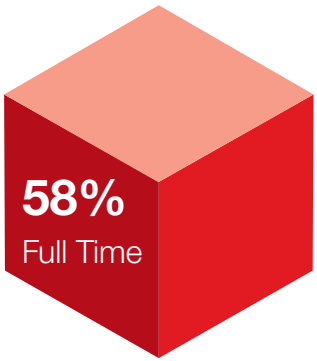


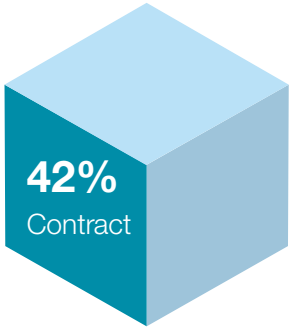


CAREER MOVES

PREVIOUS

Was your previous role contract or full time?





How long were you in your previous role?

0 - 6 months

6 - 9 months

9 - 12 months

Over 1 year

Over 2 years

CAREER MOVES

Why did you leave your previous role?

28%
Career development

12%
Higher salary

11%
More interesting work

10%
Laid off

10%
Other/ personal

7%
End of contract

6%
Work/life balance

5%
Relocation

4%
Company mission or values

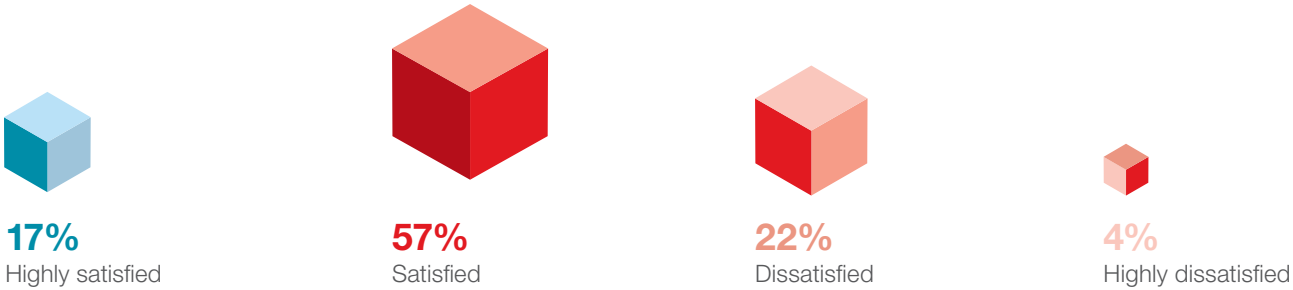
3%
Internal promotion

2%
Job security

2%
Improved relationship with manager

CURRENT

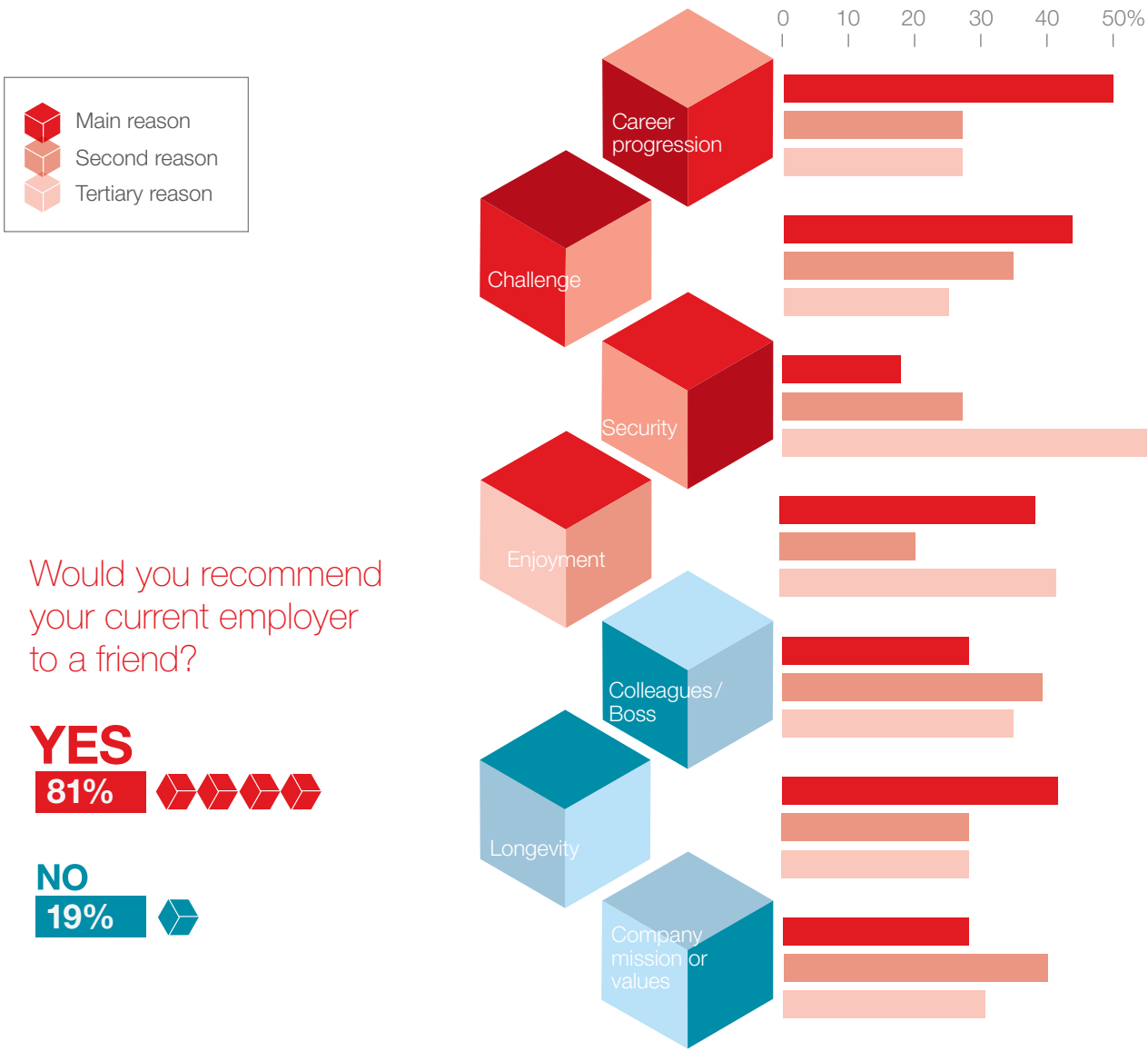
How would you assess your level of satisfaction with your current role?



Why are you satisfied or dissatisfied?

CAREER MOVES

Who or what inspires you in your current role?



Would you recommend your current employer to a friend?

YES
81%

NO
19%

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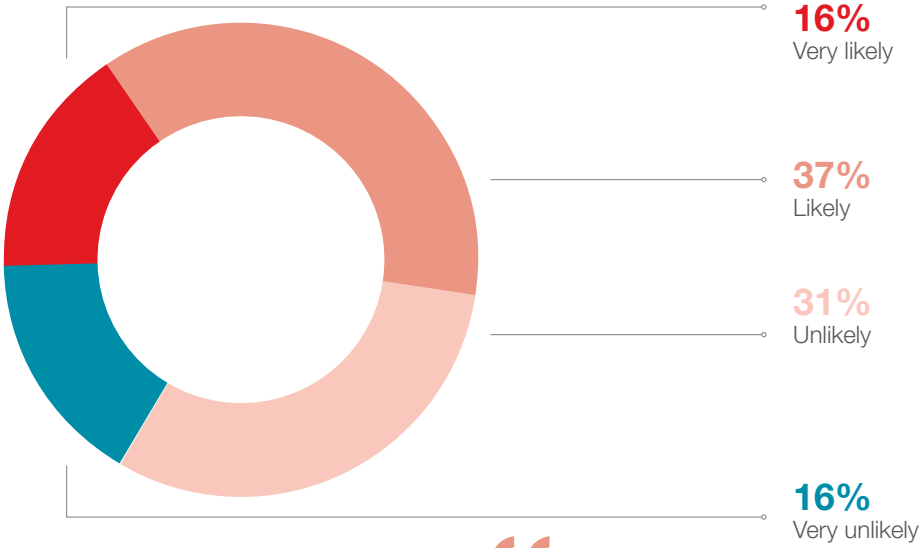
Specialist Technology Recruitment

FUTURE

How likely are you to change organizations in the next 12 months?



With demand peaking for skilled technical talent, candidates have the freedom to be selective about the opportunities they pursue, which could mean some turnover for companies who are not offering exciting projects, appropriate compensation and the use of new technologies.

Starting a career in tech is easier than ever before. If you want to learn a program, you can find a way.

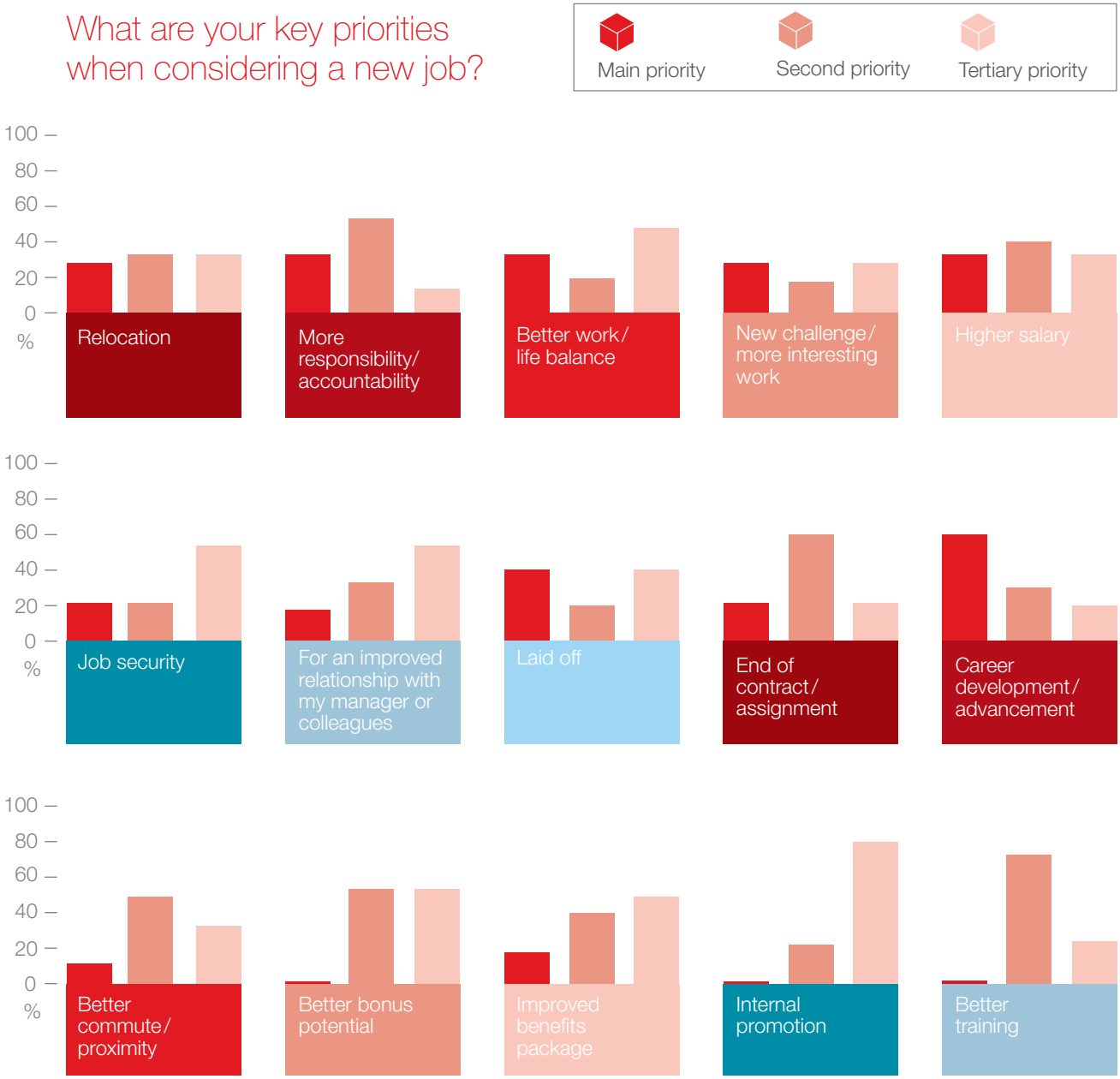
At Greythorn, we are building a robust network of big data talent to tackle the problems that businesses are facing when it comes to working with enormous data sets.

Engineers experienced in NoSQL technologies such as Cassandra, Hadoop and MongoDB are some of the primary skill sets we work with.

Dan Colleran
Director, Technology Practice

CAREER MOVES

What are your key priorities when considering a new job?



SALARY SUMMARY

SALARY SUMMARY

BIG DATA & CLOUD COMPUTING

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Junior Software Engineer	$80,000	$110,000	$75	$90
Mid Software Engineer	$115,000	$135,000	$90	$105
Junior Data Scientist	$120,000	$140,000	$95	$120
Senior Data Scientist	$145,000	$180,000	$105	$135
Architect	$135,000	$150,000	$110	$140
Senior/Lead Sofware Engineer	$140,000	$160,000	$120	$145
Principal Engineer	$160,000	$200,000	$125	$150
Chief Architect	$155,000	$200,000	$130	$180

BUSINESS INTELLIGENCE & DATABASE

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Report Developer	$80,000	$100,000	$75	$90
Business Intelligence Analyst	$75,000	$90,000	$75	$90
ETL Developer	$95,000	$120,000	$90	$110
Database Developer	$100,000	$120,000	$95	$110
Database Administrator	$90,000	$120,000	$85	$110
Business Intelligence Developer	$100,000	$125,000	$95	$115
Data Warehouse Architect	$125,000	$150,000	$120	$160

INFORMATION SECURITY

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Management and Executive	$110,000	$150,000	N/A	N/A
Security Control Analyst	$70,000	$90,000	$70	$90
Security Engineer	$80,000	$100,000	$75	$95
Security Researcher	$90,000	$105,000	$85	$100
Application Architect	$95,000	$120,000	$90	$110
Security Architect	$90,000	$110,000	$85	$110

MICROSOFT STACK

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
System Administrator/ Network Administrator	$50,000	$70,000	$50	$80
QA Engineer	$65,000	$85,000	$65	$90
System Engineer/ Operations Engineer	$70,000	$90,000	$60	$90
Network Engineer	$70,000	$120,000	$70	$115
Software Developer	$70,000	$115,000	$75	$120
Project/Program/ Product Manager	$70,000	$120,000	$70	$120
Data Warehouse Architect	$125,000	$150,000	$120	$160

SALARY SUMMARY

MOBILE APPLICATION DEVELOPMENT

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Mobile Test Engineer	$75,000	$90,000	$70	$90
Mobile Developer	$90,000	$120,000	$85	$120
Android Developer	$90,000	$120,000	$85	$120
iOS Developer	$90,000	$120,000	$85	$120

PROJECT MANAGEMENT / BUSINESS ANALYSIS

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Business Analyst	$70,000	$90,000	$70	$90
Project Manager	$80,000	$110,000	$75	$105
Technical Project Manager	$90,000	$125,000	$85	$115
PMO Manager	$105,000	$130,000	$90	$120
Project Director	$140,000	$160,000	$105	$140

WEB APPLICATION DEVELOPMENT

Job title	Full time		Contract hourly	
	Min	Max	Min	Max
Front End Developer	$80,000	$100,000	$70	$90
Software Engineer	$90,000	$105,000	$85	$95
UI/UX Developer	$90,000	$110,000	$85	$100
PHP Developer	$100,000	$115,000	$90	$105
UX Designer	$100,000	$120,000	$90	$110
Web Development Manager	$120,000	$140,000	$110	$125

NEWS & INSIGHT

THE 'NEXT BIG THING' IN WEB DEVELOPMENT

For the last several years, the buzz around mobile technology, mobile content consumption and our continued dependence on devices has increased exponentially. Throughout the rapid evolution of web and mobile development, the way this content is created has not changed at the same pace.

Blogs and other in-house websites have actually prolonged this slow development of how content is being created and distributed across the web. WYSIWYG editors have made CMS users lazy, leaving businesses and brands in a vulnerable position when it comes time to develop a mobile or tablet-friendly site. Even still, developing sites for mobile phones and tablets will not be enough – businesses need to be ready to adapt to the 'next big thing.' Treating web platforms in the same manner as we treat print media will no longer be a tolerable shortcut in a few years' time.

While the 'next big thing' on the web is yet to be determined, it is important that businesses take caution in the development of their digital infrastructure. Back-end developers will be high in demand over the next few years as the need for dynamic websites continues to increase and as organizations continue to mix their responsive, mobile and adaptive content into their online campaigns.

For developers, this progression means staying ahead of the curve in terms of skill set and trends in the market. Understanding server-side development and client interpretation is key to becoming successful as these trends mature. Salaries for back end developer/engineer positions climb upwards of $119,000 per year.

These changes in content creation will also be crucial for front end developers to manage, as web design is not only about the sophistication of the code, but also about the aesthetic message that the content elicits. Utilizing the framework and strategic plan outlined on the back end, front end developers will be tasked with continuing a fluid user experience across platforms, as many studies have shown that users who are on mobile and users who are on desktop are actually very similar consumers.

Front-end developer salaries are currently up to $112,000 per year, with some employers paying as much as $126,000 per year for senior level talent. Without a doubt, the market will soon be intolerant of web development short cuts and businesses will need to work smarter, not harder to secure the talent and digital infrastructure they need in order to remain successful. ■

VIC BAGNALL ACCEPTS NATIONAL ROADWAY SAFETY AWARD

Greythorn contractor, Vic Bagnall, of the Washington Department of Transportation has designed a fully-automated system using infrared technology to detect trucks with bad breaks.

On Nov 6, 2013, Greythorn contractor Vic Bagnall attended the National Roadway Safety award ceremony as a result of his contributions to the development of an infrared technology that keeps unsafe commercial vehicles off of Washington roadways. KOMO News first covered this in April 2013.

The automated infrared roadside screening (AIRS) system consists of cameras installed at weigh stations to scan and analyze vehicles as they enter the station. The results are displayed on a monitor for the WSP Commercial Vehicle Enforcement staff to use and then make a judgment call on whether the vehicle needs further maintenance.

During a testing period in October 2012, 12 trucks were removed from the road over two days due to the intelligence that this technology provides. The vivid color images are produced within milliseconds, glowing red where brakes are working properly and showing cool areas where they are not.

The system is currently a pilot project and testing is expected to conclude around May. When the Washington State Department of Transportation approves it, it will be installed in 11 weigh stations and ports of entry.

Vic began this contract opportunity with WSDOT through Greythorn in 2008. ■

DATA ANALYTICS IN HEALTHCARE

Is Big Data a marketing buzzword? A sales pitch? Can we get a translation?

You'll get all of those sentiments about the term big data these days. The resident experts who design and build massively parallel, distributed systems know this well. Whether through the open source community or not, the term big data includes those experts developing the algorithms, the indexing schemas, the infrastructure and all the rest. They'll tell you that the term has been around for years and the phrase big data is superfluous to them. They're certainly spot on.

Big data is not a new phenomenon, but rather a term coined to market the collection and usage of extremely large and complex data sets. This includes the tools used to share and visualize results, the intelligence behind indexing, searching, and analyzing data, and the infrastructure behind capturing, storing and transferring it. It's the ecosystem behind the massive amounts of data being collected instant by instant, all over the world. One of the most important outcomes of having all this information is going to be what we choose to do with it.

What does it have to do with healthcare?

You've undoubtedly heard of Accountable Care Organizations, Health Information Exchanges, ICD-10, HL7, EMRs, APIs, and the like; the list goes on and on. All of these tools, frameworks, standards and organizations, combined with the power of data analytics, enable our ability to capture, store, manage, extract, share and make sense of clean data. Ultimately, all of this will ensure critical information is in the hands of physicians and clinical staff to improve the quality of care, at the point of care.

In short, there are many implications of big data in the healthcare space and some are more apparent than others. En mass, once the proper infrastructure, software, applications, security, compliance and interfaces are in place, the power of all of that patient data is overwhelmingly impactful and in many capacities.

Think about it from a demographics perspective. On a community, regional, statewide and national level, the point of care is going to be impacted tremendously. ▶

DATA ANALYTICS IN HEALTHCARE (FOLLOWING)

When you combine the data harnessing power of EMRs with HIEs and ACOs, you have a recipe for acute diagnostics, trend analysis, variance analysis and of course predictive analysis on specific populations, which may be the most important of all.

With this information, we will be able to answer these questions and many more:

- Who is at risk for certain ailments? When and why?
- What is this person's risk profile?
- What is the best course of remediation? Prevention?
- What works and what does not work? Why?

By using the power of big data in the finance and operation teams within health systems, the given automation capabilities are extensive. Together, these tools will save organizations time and ultimately, money – both of which can be used to better serve the patient.

Case Study: Atigeo

There are hundreds, if not thousands, of companies in various stages that will help serve our healthcare community's desire for data analytics. One such company, Atigeo, is working to utilize data intelligence to directly impact our quality of life.

Atigeo's health solutions apply xPatterns intelligence across EHRs and other clinical tools to improve organizational performance.

According to their SVP of Engineering, some of what Atigeo's experts and tools are currently focused on include clinical process automation, decision support, fraud detection, and evidence based medicine.

"If you really want to solve these problems correctly, you have to have localized models and proper feedback loops. In the infrastructure, other than just getting good architecture and compliance, the true value is in doing the analytics very well. It's in the intelligence layer where we're most unique – we have the fastest time to market, with measurably better analytics, and it benefits everyone."

There are a plethora of companies out there that are working diligently to bridge the gap between massive amounts of data and better patient care.

Soon to be gone are the hand written notes scribbled into a spiral pad. Welcome to fully integrated user interfaces, with data intelligence engines behind them and the technical infrastructure to bring mission critical data to a myriad of devices, all at the push of a button. ■

SEATTLE COULD BE BIG DATA CAPITAL

The city of Seattle has been highlighted as a possible hub for big data development, which is likely to be one of the biggest advancements in the technology and IT industry over the coming few years.

While there have been some definition problems with big data recently, partly because every up-and-coming firm wants to hitch its wagon to the in-vogue tech, it is clear businesses across the globe are eager to make use of its potential benefits.

Seattle, which has a rich history when it comes to software development, could be set to benefit from this boom, reports Geekwire.

Business leaders gathering for the recent Big Insight: Making Sense of Big Data in Seattle event organized by Xconomy suggested the city has the combination of tech skills and strong infrastructure to really stand out from the crowd, even in the busy US marketplace.

John Slitz, Chief Executive Officer of big data startup SpaceCurve, admitted almost everyone is trying to fasten on to the tech industry in one way or another.

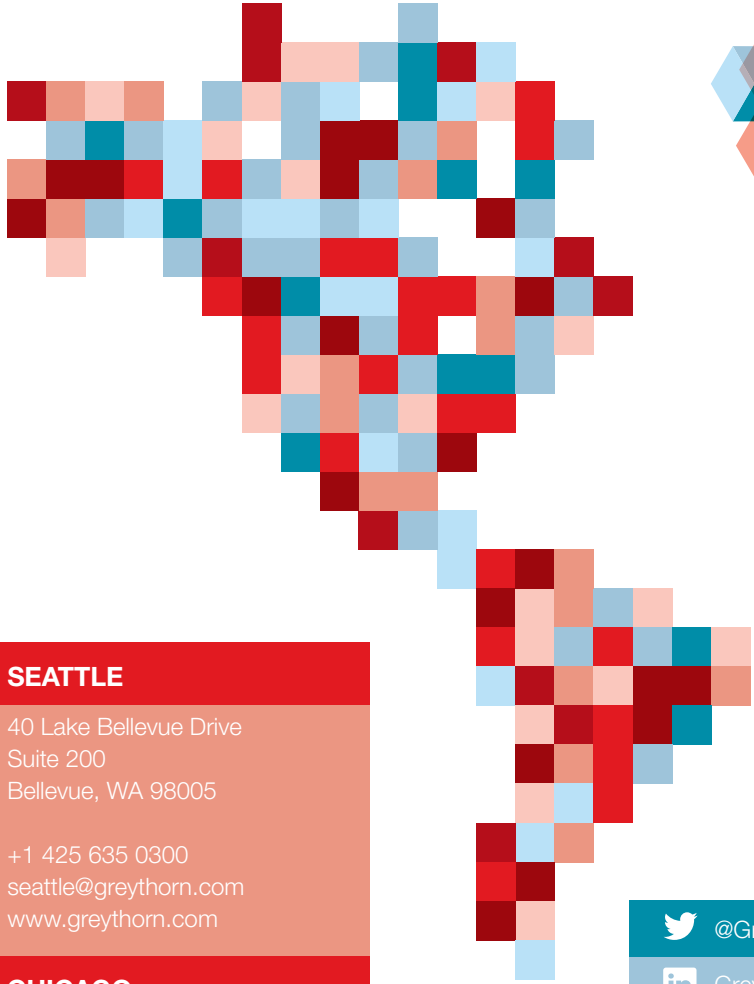
However, he argued there are a number of factors that make his home city an ideal place to engage with big data.

“Seattle is truly unique in its focus on software, and I think the depth of experience ... is just outstanding, in terms of database skills, prep programming skills and cluster programming development,” argued Slitz.

SpaceCurve recently raised an impressive $10 million in funding, while the city hosts a number of different start-ups focused on taking advantage of the growing corporate interest in big data-enabled technologies.

Jeremy Jaech, Co-Founder of SNUPI Technologies and the event’s keynote speaker, added to the mood of optimism by comparing the area favorably to its rival in Silicon Valley.

“They have more tech workers in total ... but we are software kings up here. And so the sheer size of that talent pool gives us the people we need to develop big data tools and techniques,” he claimed. ■



ABOUT US

Greythorn is a market leading and award winning technology recruitment specialist. Founded in 1976, it has established an excellent reputation for the authoritative and personable service it provides to both its clients and candidates.

Since our inception, we have grown globally to provide expertise in Asia, Australia, Ireland, North America, South America and the UK. With demand in the technology sector continually increasing, our commitment to providing an expert and ethical service remains strong, ensuring we remain your 'consultancy of choice.'

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WTIA

A special thank you goes to WTIA for assisting in the promotion and delivery of this report.

Washington State's technology workforce is educated, well compensated, and extremely innovative. Unfortunately, there aren't enough qualified professionals to support the ever-increasing needs of Washington State technology companies. Closing the gap between the supply and the demand for talented tech workers is a desire shared across the technology landscape in Washington.

WTIA will help you gain greater access to tech talent through partnerships with educational institutions, technology-focused hiring events, continuing education for your staff, and executive connections.

THE BOYS AND GIRLS CLUBS

For every response to our survey, we donated $1 to the Boys and Girls Clubs. Boys & Girls Clubs are a safe place to learn and grow – all while having fun. It is the place where great futures are started each and every day.

In every community, boys and girls are left to find their own recreation and companionship in the streets. An increasing number of children are at home with no adult care or supervision. Young people need to know that someone cares about them. Boys & Girls Clubs offer that and more. Club programs and services promote and enhance the development of boys and girls by instilling a sense of competence, usefulness, belonging and influence.

ACKNOWLEDGEMENTS

We would like to thank all those who completed our survey – without your contribution, this market report would not be possible. If you did not complete our survey this time, please do so next year to ensure we can continue to develop the depth and quality of this report and continue to provide you with a fair and balanced picture.

This market report is intended to give you a very general overview on the changing nature and complexity of the IT employment market; for a more tailored and confidential discussion on how this will affect your business or indeed your own career, please get in touch with us.

DISCLAIMER

This research was carried out by means of an electronic questionnaire and supplemented with data and market information that Greythorn has access to. The results are provided as generic market information only.

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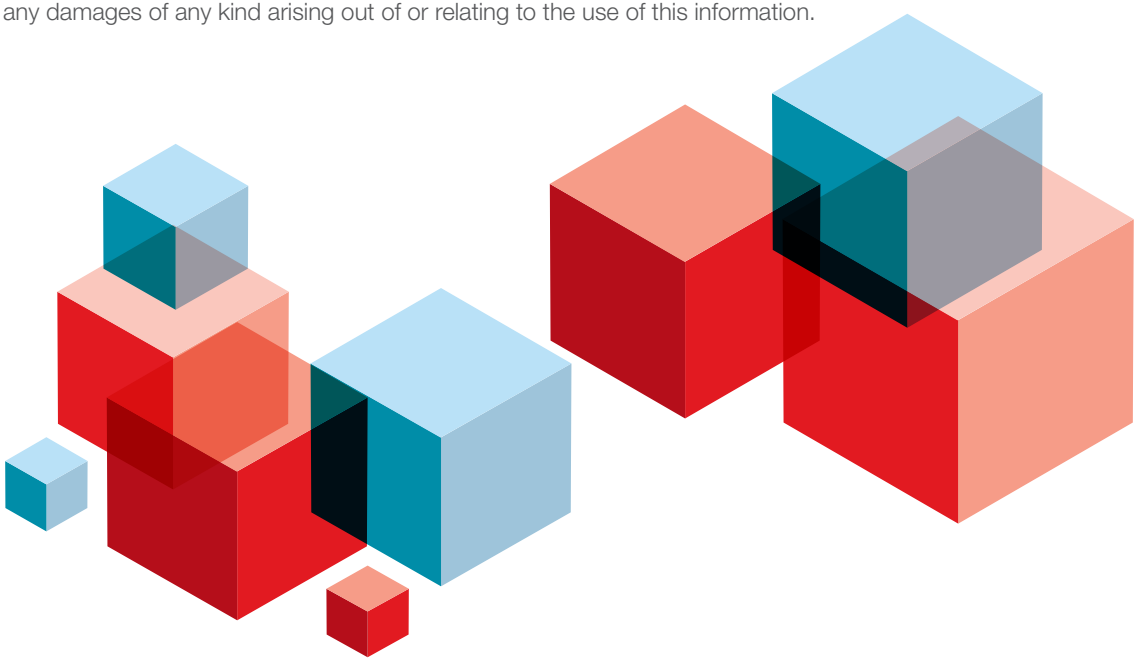

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