Q: What is visualization, and how can it be used to make data more meaningful?

Lundblad: Visualization is the process of presenting data in a way that makes it easier to understand and analyze. It can be used to identify patterns, trends, and outliers in data, allowing for more informed decision-making.

Q: What are the benefits of using visualization tools?

Lundblad: Visualization tools allow for the discovery of insights that might be missed when data is presented in tabular form. They enable users to explore data in new ways, identify patterns, and make more informed decisions.

Q: How can organizations measure the effectiveness of their visualization efforts?

Lundblad: Organizations can measure the effectiveness of their visualization efforts by tracking the number of times a visualization is used, the amount of time users spend interacting with it, and the impact it has on decision-making processes.

Q: What are some common mistakes organizations make when it comes to visualization?

Lundblad: Common mistakes include using too many colors, using pie charts too frequently, and failing to consider the audience and context of the data.

Q: How can organizations improve their visualization practices?

Lundblad: Organizations can improve their visualization practices by incorporating user feedback, using best practices for data presentation, and regularly reviewing and updating their visualization strategies.

Q: What are some emerging trends in data visualization?

Lundblad: Emerging trends include the use of animation to make data more engaging, the integration of machine learning to identify patterns, and the use of interactive visualizations to allow users to explore data in new ways.

Q: How can organizations prepare for the future of data visualization?

Lundblad: Organizations can prepare for the future of data visualization by staying up-to-date with the latest trends, investing in training and education, and collaborating with visualization experts.

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To learn more about data visualization, watch our highly-popular webcasts:

- flowofdata.com
- visual.ly
- perceptualedge.com/blog/

Napoleon Bonaparte once said “a picture is worth a thousand words.” And over 100 years later, no saying remains truer in the world of business intelligence (BI) and data visualization. The Quarterly recently talked with QlikTech experts James Richardson, Senior Director of Product Marketing and Patrik Lundblad, Visualization Advocate about data visualization and what it means for QlikView users like you.

Q: What is data visualization, and how can it be used to make data more meaningful?

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Q: What are the benefits of using visualization tools?

Lundblad: Visualization tools allow for the discovery of insights that might be missed when data is presented in tabular form. They enable users to explore data in new ways, identify patterns, and make more informed decisions. They are useful and one of the most impactful types of visualization.

Q: Which visualizations are proven to be more impactful than others?

Lundblad: Mapping visualizations are highly impactful, as much of the data we work with has location tagged to them. Mapping technology allows you to plot an attribute in context. On top of that, you can add layers so that the map is not static, and users can interact with it. Let your users interact with the visuals where there is a pressing need to do so. You may see surprises but you may also spot issues with your data. Don’t let the tools take the blame for bad data. Lundblad: Use maps to help your users understand the location of data. Make sure they can interact with the map and take more questions, such as “why does the dashboard look as it does right now?”

Lundblad: These are three big trends in data visualization. First, there’s been a shift from pivot table visualizations to multivisual solutions, which allow us to look at multivariate data in a way that is highly exploratory. Second, animation. Humans, by nature, can better spot movement than they can spot fine details. Animating data through a time series allows users to see small changes in the data that would otherwise be difficult to spot with figures, rows, and columns. And finally, there is no longer just one type of visualization. The two most common in the world of BI are traditional dashboards and visual analytics. Traditional dashboard reports look at KPIs that are role-specific and allow you to quickly monitor how you are doing against performance measures. Analytical visual analytics allow you to discover patterns and explore large data sets without necessarily having a preconceived question. And they are often used by different people within the organization. This means for you is that you have to create dashboards with a broader audience in mind. Don’t use them to just talk to the right person. Allow them to discover and explore large data sets in their own way.

Q: What are the most common mistakes that organizations make when it comes to visualizations, and how can you correct them?

Lundblad: The use of color and perception is very important in visualization and many organizations misuse it. Using perception and color in different ways can make the data and context visible, but today, color can be used to manipulate, to mislead, and to highlight things in the data. For example, you can use color to highlight positives or negatives, or using color to show the data changes. There are three primary types of scales: qualitative, sequential, and diverging. Qualitative scales give each item its own color. Sequential scales allow you to see one color change to another color. Diverging color scales allow you to go from one color to a light color and then back to a dark color to show the threshold of what’s in between. I see many organizations use their brand colors in their visualizations. I see this everywhere, and this is a mistake; make sure that you pick colors that are meaningful. Richardson: I agree, use color appropriately. Many organizations misuse (and abuse) color and it obscures the meaning. And I agree with Patrik that putting marketing ahead of analysis is never a good idea.

Q: What are some common mistakes organizations make when it comes to visualization, and how can they correct them?

Lundblad: There are some very common mistakes that people make when they design dashboards. First, they don’t design them; they create dashboards without any understanding of design. Make sure that the people who create visualizations understand the basics of color theory and perception. And they are often used by different people within the organization. Let people explore data in new ways. They should correct them.

Q: What are the most common mistakes that organizations make when it comes to visualizations, and how can you correct them?

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Big Data Means Big Impact

By David Feinleib, Guest Contributor

When it comes to Big Data, what matters is not the amount of data we’re working with. What matters is the scale of the business impact we achieve by analyzing our data and acting on it.

As I discuss in my new book, Big Data Demystified, Big Data is the intersection of data combined with software applications. This combination is making it far easier and more cost-effective for us to be data-driven at work and in our day-to-day lives.

Companies like Amazon and Netflix use Big Data to recommend the next book for us to buy and movie for us to watch. Google uses Big Data to figure out what advertisement to display next.

Yet Big Data has an even broader range of applications. Architects use Big Data to design modern buildings, from skyscrapers to music halls. Educators use it in software applications that make it easier for college students to complete their coursework.

Big Data is a part of mobile applications that enable us to monitor our health and improve our diets. All around us, Big Data Applications are changing our daily lives.

My own fascination with Big Data began while I was training for Ironman France. For those who aren’t familiar with an Ironman event, it is a 2.4 mile (3.86 km) swim, a 112 mile (180.25 km) bike ride, and a full 26.2 mile (42.2 km) marathon, one right after the other.

Training for such an event requires discipline. It also requires careful attention to data. There is no better way to train than to track your swims, rides and runs, calories taken in and calories consumed.

Such data is critically important because of the trend information it provides over the long-term. It tells you whether you’re training smartly and are on-track to reach your goals or if you need to make some changes.

Knowing how we’re doing over time, rather than at any one point in time, is one of the key insights we can gain from Big Data. And that’s very valuable insight, because when it comes to measuring progress, our performance over time is more important than our performance at any given moment.

Nutritionists will tell you that one of the most important factors in changing your diet is tracking what you eat. That same approach applies in many other areas of our work and lives as well. But tracking our activities isn’t enough. We need to be able to act on them. To do that, we need to be able to visualize how we’re doing.

As it turns out, our eyes are one of the highest throughput forms of input into our brains. They deliver ten times more information every second than our sense of touch, and a hundred times more information than our senses of hearing or smell.

So whether we’re using mobile apps to track calories burned, or using desktop software to evaluate business metrics, it’s not enough just to have the data. We have to be able to act on it.

With the right data and the right software, we can visualize where we’ve been, where we are, and where we’re going. That’s what makes Big Data one of the most important trends to come along in decades.

David Feinleib produces The Big Data Landscape and Big Data Trends. He is the author of Big Data Demystified. Reach him at dave@thebigdatagroup.com.
Nominations Open: Qlik Luminary Class of 2014

Do you know someone who is an inspiration to the QlikView community? Someone with a drive, passion, and expertise for QlikView that makes them stand out from the crowd? If so, then nominate them for the Qlik Luminary Class of 2014.

The Qlik Luminary Program highlights the best and brightest customers, partners and influencers in the QlikTech ecosystem. Qlik Luminaries have attained eminence in the QlikView community, finding new and innovative ways to use and deploy QlikView. They are advocates of QlikView, and champion our vision for user-driven BI and its potential to make transformative discoveries. Our 10 Charter Luminaries from around the world exude qualities such as outstanding track records of community leadership; willingness to share knowledge; and a desire to make everyone they know in the QlikView ecosystem a huge success.

Qlik Luminaries enjoy a number of benefits, including:

- **Education**: Complimentary access to QlikView eLearning
- **Access**: Managed engagements with support and product teams
- **Community**: Participation in a private Qlik Luminary community
- **Insight**: NDA webinars with the product team
- **Perks**: VIP treatment at QlikTech events
- **Credibility**: Qlik Luminary digital badge and profile on QlikTech’s website

Candidates for the Qlik Luminary Program can be nominated by peers, QlikTech employees or themselves. Nominations are currently open. And, we will announce the Qlik Luminary Class of 2014 in January 2014.

Nominate yourself or a colleague today.
Back to School: QlikView Academic Program

Students need more than just textbook skills to succeed in today's world. They need strong analytical skills and experience with leading tools that help them make better decisions faster. Keith Carter, Qlik Luminary and former Executive Director Global Supply Chain Intelligence at Estee Lauder, joined National University of Singapore with the goal of creating a curriculum that took advantage of his industry experience, but moved away from the typical textbook learning experience. In just two weeks, Carter designed a course that took advantage of QlikView’s Academic Program, allowing him to put QlikView at the core of his curriculum.

The QlikView Academic Program exposes students, professors, instructors, and researchers to the power of QlikView – in the classroom. Qualifying faculty can apply for free QlikView licenses to support their curriculum, and can access online resources and training to help them get started. Currently, over 100 faculty members in more than 30 countries have applied for the program.

For Professor Carter, the hands-on experience he could provide to his students was invaluable. “Because of the QlikView Academic Program, instead of using textbooks, our students are getting real industry experience with Big Data tools to learn about a wide variety of industries such as transportation, beverage and retail,” said Carter. “As a result, students preparing for careers are gaining strong analytical skills, and learning how they can leverage data to make better business decisions. Knowing how to use a ground-breaking tool like QlikView lets them show their future bosses what’s possible. They have even said to me how excited they are at the prospect of a big company hiring them as analysts.”

Read more about the positive impact QlikView had on Professor Carter’s curriculum at the National University of Singapore, and how his students used QlikView in the classroom.
Q4 Americas Public Course Schedule Announced

Looking to get more out of your investment in QlikView? Our Education Services team is here to help. With a variety of online, classroom, and on-site training options, our training staff can help you gain the knowledge and skills needed to take your QlikView knowledge to the next level.

QlikView Education Services is pleased to announce the release of its Q4 Americas Public Course Schedule. To keep up with growing demand, QlikView has added additional classes (both virtual and classroom) for Q4. Registration for all courses is open – click here to visit our website.

Training is being offered in the following cities:

- NEW! Bloomington, MN (Minneapolis)
- NEW! Raleigh, NC
- Atlanta, GA
- Burlingame, CA (San Francisco)
- Chicago, IL
- Columbus, OH
- Las Colinas, TX (Dallas)
- Newton, MA (Boston)
- New York, NY
- Radnor, PA (Philadelphia)
- Toronto, Canada

*Virtual training is scheduled in both eastern and central time zones.

New course offering: QlikView Designer – Virtual ½ Day

Ever want to attend training in the morning and apply your knowledge the very same afternoon? To fit your busy schedule QlikView is now offering our popular 2-day Designer course in ½ day virtual sessions. Attend virtual class for 4 consecutive mornings or afternoons and keep the rest of your day open for business discovery. Our first sessions are scheduled for November 11 – 14. Contact ustraining@qlikview.com for registration information.

Please contact ustraining@qlikview.com with any questions.