

# HR Strategy Brief



## HR Data Visualization: The Power to See, Plan, Act

Nov Omana, Collective HR Solutions

COLLECTIVE HR SOLUTIONS

Personnel Administration, Human Resources, or Human Capital Management, call it what you will, it still comes down to people. People run the business, design and build products, and sell to and manage customers. They are an integral part of understanding and managing the business. Over the years, companies have spent hard dollars to monitor the “soft” asset called employees, their people. But now, new tools and technologies provide unprecedented insight so organizations can easily make the most of this valuable resource.

The workforce has always been the focus of Human Resources, no matter what it was called; labor, personnel, or human assets. But in today’s environment, the workforce has three dynamics that make it more complex than ever before:

- 1) Generational spans
- 2) Contingent and temporary workers
- 3) Global in location and culture

Human Resources is charged with managing this diverse group and creating an agile, cohesive, skilled resource that enables the business to sustain growth in the changing economy.

A major challenge is quantifying the impact that individuals and groups have on the business. Only then can we effectively tune the structure and roles to improve results. HR and management need levers with which to control the outcome. As Human Resources practitioners, we can certainly understand the cost side of the equation – salary, benefits, vacation, etc. But we have yet to successfully standardize the quantification of a resource’s value and their work efforts. We have no gauge to measure how an individual worker’s actions – productivity, innovation, resignation – impact the business. So what are we left with to truly manage this key asset? We have lots of information that is presented in reports, screens, or dashboards without correlation or context. It’s a ton of data that contains little to no real insight, and a loose, if any, connection to decisions that need to be made. What do we in HR and the business really need in order to assimilate and make sense of all this data?

### **The Power of Visualization**

Confucius, a renowned Chinese philosopher, is credited with the adage, “A picture is worth a thousand words”. This saying was developed at a time when written language in China was only approximately 300 years old. Napoleon Bonaparte was quoted, “A good sketch is better than a long speech”, as he outlined his plan with a map before going into battle.

They were right. The average reading speed is 200-250 words per minute but we can process pictures 10,000 times faster than words. In our modern daily lives information comes at us via email, podcasts, blogs and reports in torrents never imagined by the likes of Confucius or Napoleon. The written context is now way too much to absorb. Whether a diagram, a battle plan, or just a picture, the visualization of a fact, concept or idea can impart information and knowledge, and assist in making a decision far faster than words.

---

## Information Visualization Enabling HR Business Alignment

Symbols have been around a long time. Hieroglyphic-like pictograms were part of the first written languages and we are still surrounded by them for good reason. Symbols efficiently impart information and help us make decisions. Here are a few examples that quickly tell you something AND help you make a decision:



Within the Human Resources arena, we generally have the ability to view information representing different dimensions of our workforce. It's usually delivered via metrics presented in dashboards. These dashboards have the analogy of a car dashboard, telling us the 'fuel, distance, and speed'. But rarely do we see this information coupled with a sense of direction or goal to be reached, or our ability to reach it. Hence the information really only communicates what has happened in the past or is happening in the present, not how the future might look with potential changes in fuel, distance or speed.

What we really need is the ability to transform that data into a visual picture, a diagram or symbol representing a combination of elements that communicate business information. This visualization, coupled with modeling the "future" allows us to make directional decisions that take us to where we wish to be.

Visualization is now being used heavily in HR decision-making. The 'converts' using visualization instead of traditional reports are gaining more insight into their company workforce than ever before. In my opinion, this is at the crux of the changes we are seeing in HR's support of the business. The manner in which information is displayed and digested is enabling the entire HR and business team to participate equally in decision making. Knowledge from both sides comes together around intuitive visual information to make optimal recommendations and decisions.

With robust visualization, decision makers can view information at the individual worker level or aggregate it for a holistic view of a department or division. They can get a quick overview or dive deep into a particular area. A highlighted box will draw the eye to focus on a key issue more quickly than any traditional tabular report.

Taking it further, like creating a detailed profile, allows additional information to be displayed and potentially completes the picture, facilitating further analysis and decision making.

Although our current dashboards allow for some organizational understanding, they still present information in a flat manner such as graphs and pie charts. But to actually view the organization and its components in a "drawing", such as an organizational chart, is very compelling and allows instant understanding of the information in the relevant context of the organizational structure.

---

Intuitive symbols or visual treatments support the ability to analyze information quickly and spot opportunities or concerns. To be effective, however, the technology needs to allow for information to be aggregated from multiple sources, and for cross-business/discipline information analysis. It also needs the ability to flag conditions as anomalies (good or bad), and the ability to model the future state – allowing practitioners to see the implications of proposed plans and take action to shift to new business models, organizations and use our Human Resources optimally.

Two other capabilities also need to exist within a visualization tool – security and mobile access. The security allows the dissemination of information to the appropriate levels or people in the organization, facilitating greater collaboration. Security ensures that individuals see only the information they are authorized to view. Coupling this with mobile access, through the more powerful mobile devices, like iPhones and Blackberrys allows collaboration from anywhere. Actions can be taken more quickly in response to opportunities within the environment.

### **Impacting the Organization by Supporting Agility**

All of this is much more than a pretty picture. The ability to rapidly assimilate information and act on it is critical to developing organizational agility which, in turn, is critical to success. The more capable an organization is of adapting to changing market conditions, the more likely they are to remain competitive. Now that change is constant, instant access to current, relevant information is essential.

But truly understanding the current state is only half the problem. Some tools support future state modeling, or viewing how the organization and key metrics will play out under different scenarios, to enable more informed decisions. This ability allows teams to test several scenarios, reallocate the entire workforce or move key components, and see the new strengths or weaknesses in the future structure. A plan that initially looks good on paper may prove to be damaging when examined along with the impacts on costs or in context with other organizational moves.

I have seen this done admirably by a tool developed by HumanConcepts, called OrgPlus Enterprise. The core platform and its associated modules allow HR and business teams to easily visualize the current organization complete with contractors, part time workers and complex reporting structures. Users can then securely model scenarios for change and execute the plans in order to transition the organization to the future state.

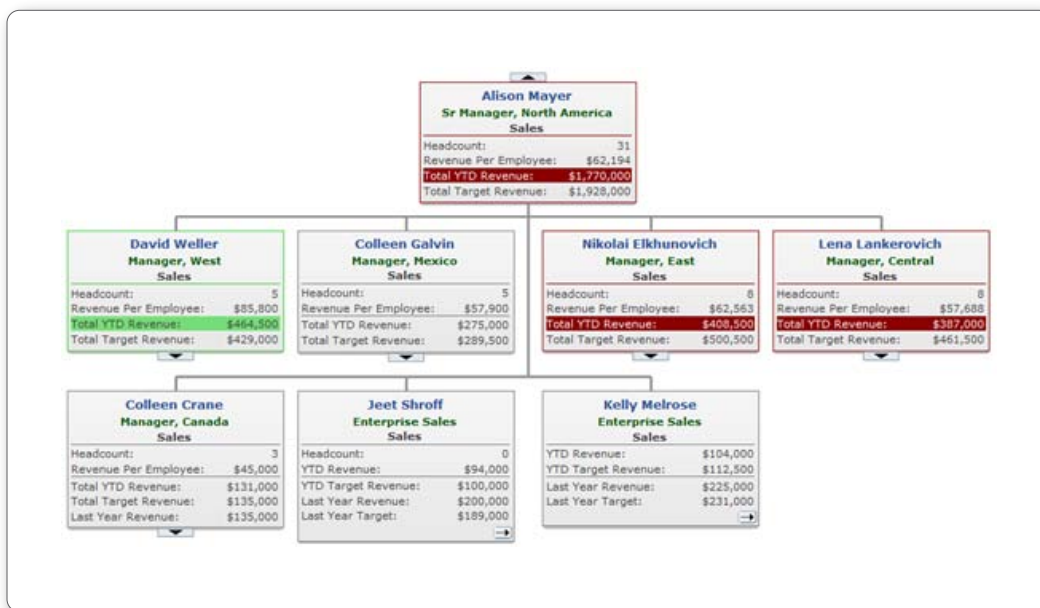
**Let's take an example to put this visualization in perspective.**

Imagine a compensation planning scenario in which you have the ability to not only reward staff through compensation but also plan career moves, create career development action plans, move staff to new roles or staff for emerging disciplines within the organization. Then imagine you can model the future of those actions, spring forward six months, and view the new organization, its ramifications on the compensation and headcount parameters and the consequential movement of skills throughout the organization.

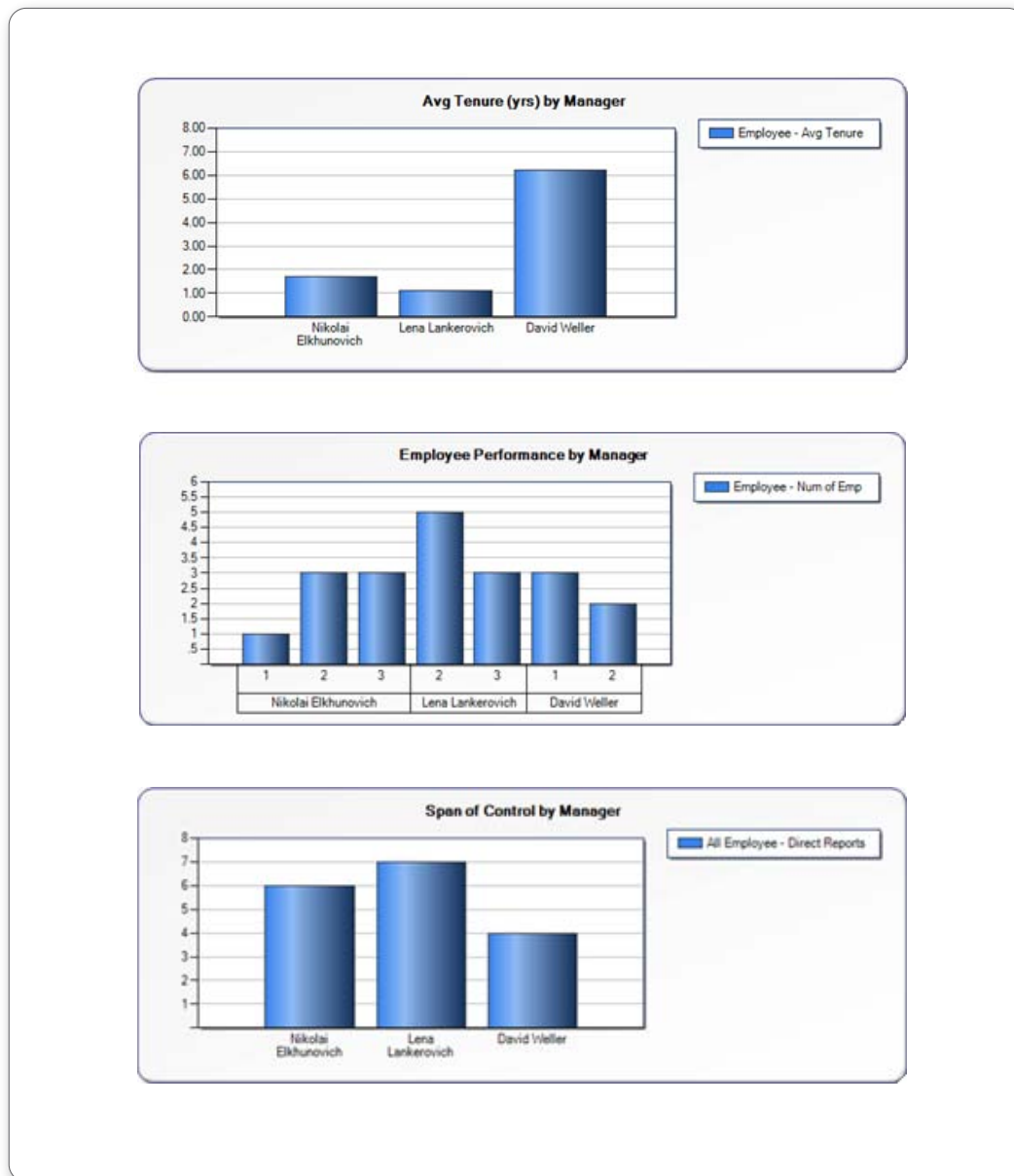
1. Sales revenue in an international organization is below target. Visualizing this information on an org chart (delivered through OrgPlus Enterprise) highlights that the problem lies in the North America region.



2. Drilling down into a visual of the North America region, we see the West is exceeding plan, while the East and Central regions are lagging.



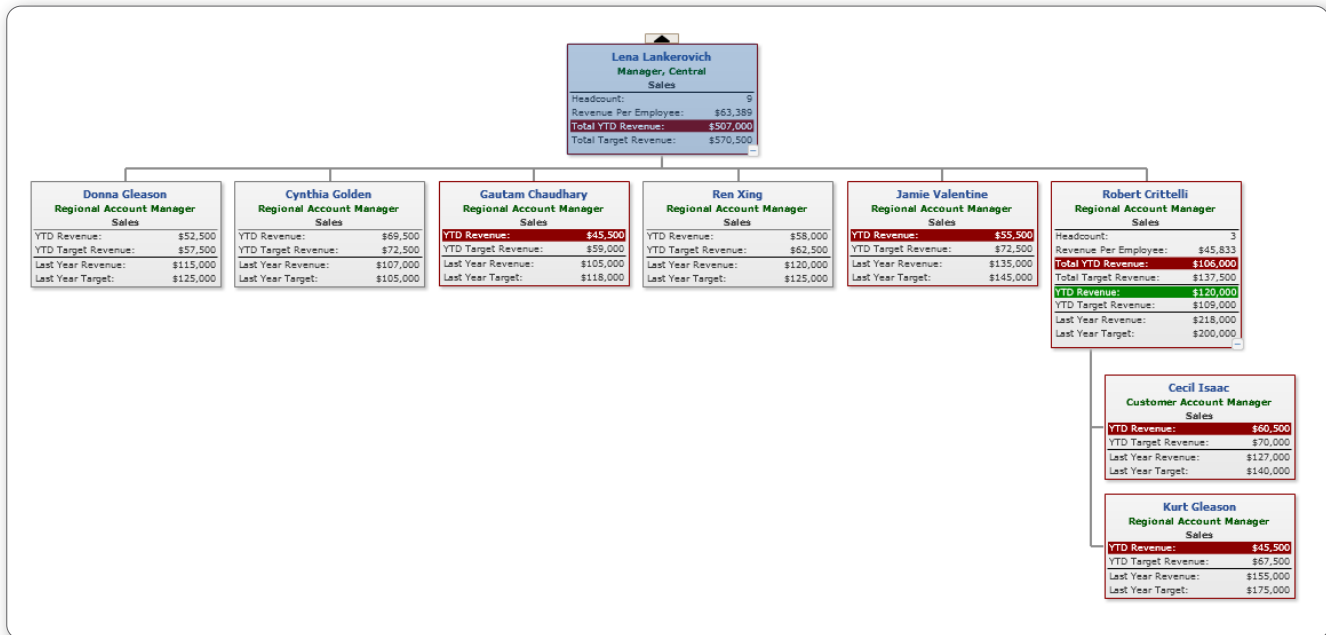
3. To investigate further, we might go to a graphical visualization of workforce metrics. In this case, we see that David Weller, the manager of the West region has a more seasoned team with average tenure of 6 years, vs. the others with novice teams. Another visualization of data shows that David's team has all high and medium performers (1s and 2s) while the other teams are skewed toward lower performers. Finally we see that David has a lower span of control, enabling him to spend more time with each direct report.



4. The visual information quickly communicates that we need to even out the teams. We can see in this chart that Robert Crittelli has high performance and leadership potential, so we might consider giving him a promotion to manage one of the underperforming teams.



5. Before moving Robert, we can model the change to see quickly how it will impact our organization and key metrics.



---

Traditionally HR sends out budget and headcount information, but now takes the opportunity to suggest a serious look at career development for staff, skills and competencies monitoring for key areas, and the ongoing need to reward and retain the workforce. If managers are supplied with visualization and modeling tools they can identify salary or career development issues, then try moving people around and see the implications of their plans. Once each manager has settled on an optimal scenario, the HR team can aggregate the plans into a single workforce 'blueprint' and monitor progress as the workforce moves through steps to the final structure. Access to visualization and modeling tools allows for better decisions and improved career progression of employees.

As we progress down this technology road, I believe we will see visualization become our standard of viewing HR information in the near future, aided by further standardization of HRXML data formalization to allow for cross discipline information integration. We'll also see workforce metrics becoming more business oriented and standardized, and will have more and more examples of how companies have seen a positive impact to the business through access to metrics and visualization tools.

To learn how easy it can be to visualize your organization and critical workforce metrics, or request a free trial of OrgPlus Enterprise, please go to [www.humanconcepts.com/visualize](http://www.humanconcepts.com/visualize).

**About the Author:**

Nov Omana is a certified Human Resources Information Professional and has been in the HR Technology arena for over 35 years. He has assisted numerous companies in structuring their HR technology strategy and systems to address and solve their business challenges. He is known for "connecting the dots" between technologies to create new solutions and solve business problems. Nov has been a frequent presenter, moderator, or contributor for IHRIM and other HR associations' presentations. He is the 2007 winner of the prestigious IHRIM Summit award. Nov is currently the Chairman of IHRIM, Vice Chair of the IHRIM Educational Foundation and sits on the Oracle HR User Group Board .

[www.creativehrsolutions.com](http://www.creativehrsolutions.com)