nagarro

Transforming businesses with value-driven analytics

Align your vision and strategy to a strong analytics framework

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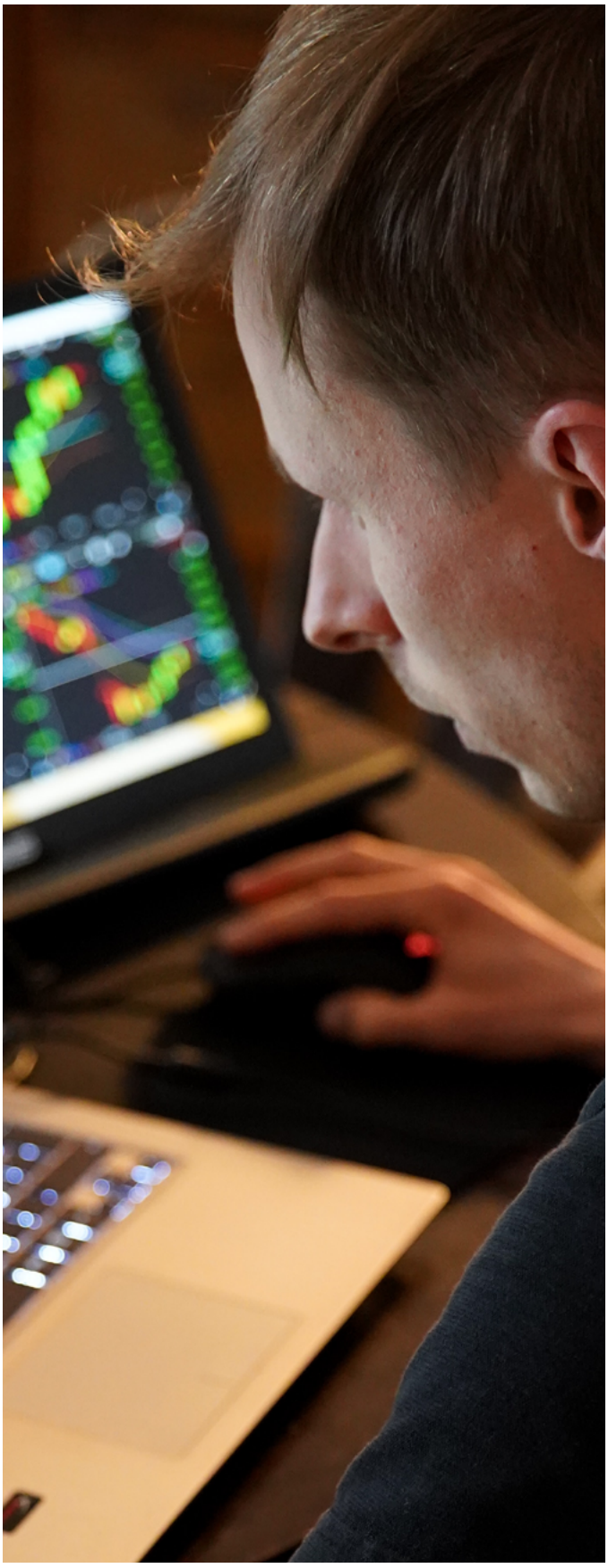
Introduction

The global advanced analytics market size was valued at USD 34.56 billion in 2021 and is expected to expand at a CAGR of 21.1% from 2022 to 2030. Several businesses have accelerated their digital transformation journey during and after the Covid pandemic and have adopted advanced analytics tools in their core processes.

Why are organizations across all industries (such as banking, manufacturing, retail, healthcare, and media) prioritizing data and analytics? The potential and instances of how analytics is transforming the way we live and do business are all around us, and it's impossible to ignore this transition. More than 35% of market share in 2021 was grabbed by the big data analytics segment. The customer analytics segment witnessed a notable CAGR of 20.1%.

Personalization, customer retention, and informed decision-making are the core focus areas for businesses these days apart from as mitigating threats and future disruptions. Data analytics comes into the picture here, aiding organizations in drawing valuable insights from their large volume of unstructured data, that also helps optimize operations and fills in security gaps.

In this white paper, we will learn all about value-driven analytics, and how it can lead to business transformation. We will also understand how a value-driven analytics framework, guided by metrics, can redefine the transformation strategy of any organization and lead to positive outcomes.



1. Has the analytics bubble burst?

Not really. The truth is, most businesses are able to leverage only a fraction of the potential value from data and analytics.

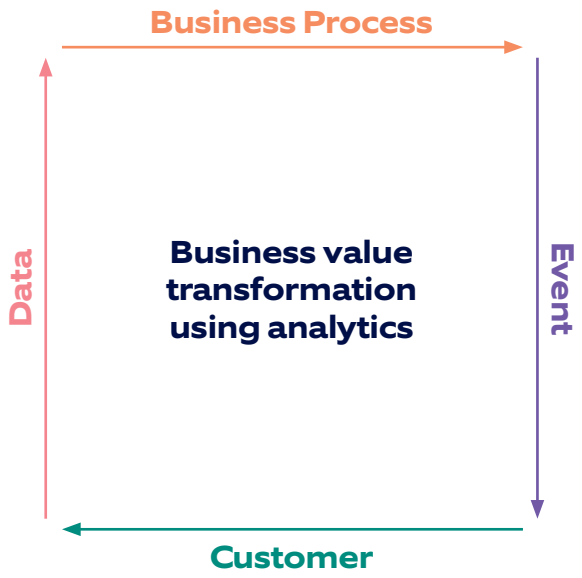
The biggest barriers they face in extracting value are organizational. Many struggle to incorporate data-driven insights into day-to-day business processes and several others fail to derive a measurable ROI from analytics initiatives.

The need of the hour is to put the business value before analytics and start with the basic questions:

- What problem do I want to solve?
- What business value will I derive out of analytics?
- What are the insights I am looking at?

Let us start by defining the business value from analytics. This can be envisioned across four key dimensions:

- **Value of data**
  Transforming and monetizing data from raw data to insights to decisions and finally, actions.
- **Business process transformation**
  From business process-centered to analytics-centered—embedding analytics into everything.
- **Event-driven action**
  From reactive action to customer, risk and operational business imperatives to intelligence-driven proactive actions.
- **Customer expectation**
  Anytime, anywhere interaction that is personalized, contextual, and omnichannel.



Organizations have to delve into all these dimensions to:

- Define **VALUE**
- Implement **ANALYTICS**
- Measure **OUTCOMES**

2. How do we derive value out of analytics investments?

Implementing the **Value-Analytics-Outcomes** approach for analytics and business transformation initiatives will provide measurable outcomes. In the following example, let's illustrate how this approach plays out in deriving business value transformation in a customer engagement initiative.

Defining Value

- Enhanced customer engagement

Implementing Analytics

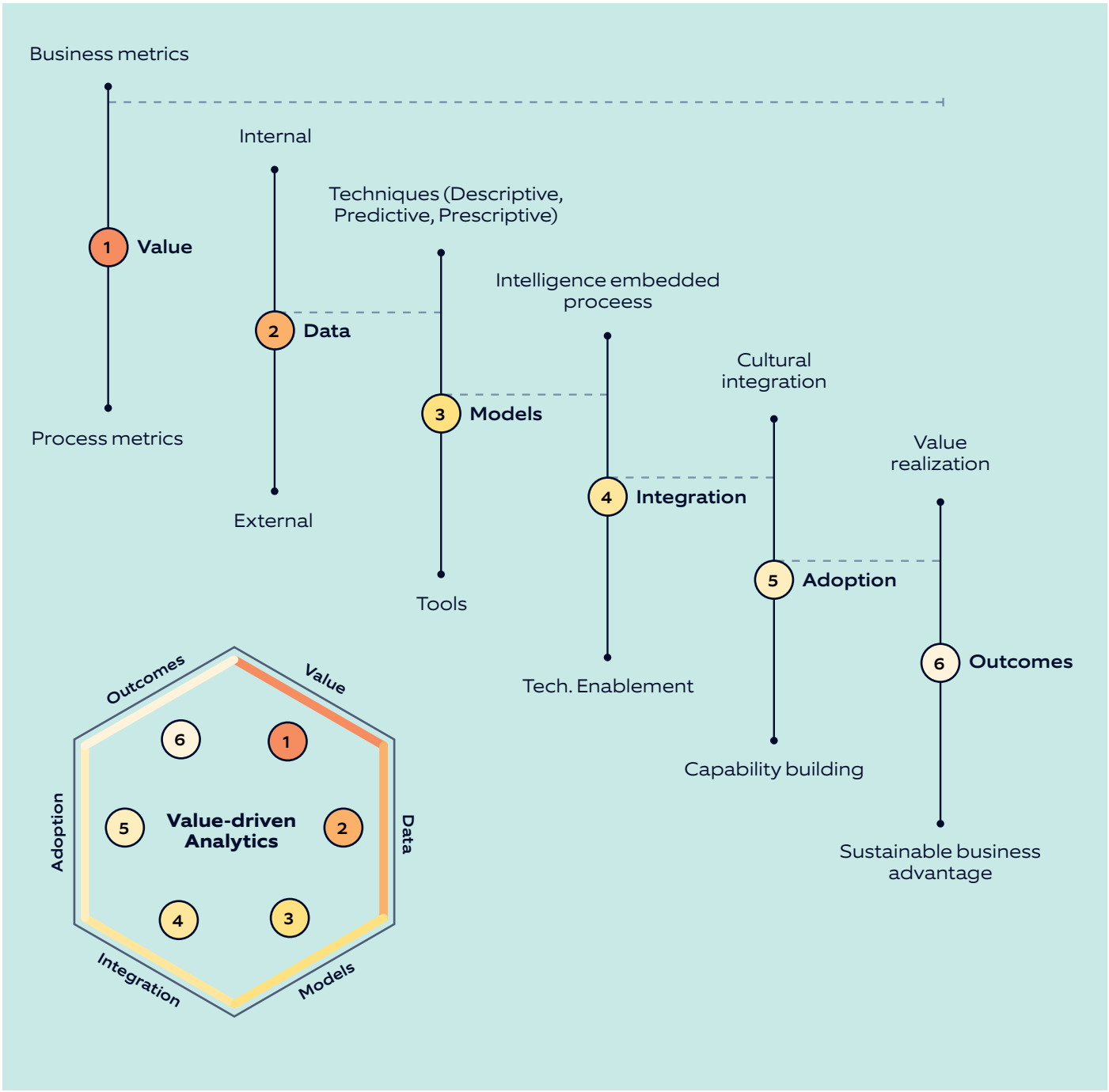
- Integrating and analyzing customer interaction data
- Understanding customer interaction with analytics-driven insights
- Embedding analytics intelligence in processes
- Enabling unified customer experience in multi-channel space

Measuring Outcomes

- Improved rate of repeat purchase
- Improved NPS
- Reduced customer churn

3. Is there a guiding framework to help organizations derive transformational business value?

An effective analytics-driven business transformation strategy needs to be viewed through the prism of our Value-driven Analytics Framework which breaks down the transformation strategy into six key components.



Key components of the framework

Value

The first step is to ask some fundamental questions that shape the strategic vision and establish the value envisioned from any analytics initiative.

- What will data and analytics be used for?
- How will the insights drive value?
- How will the value be measured?
- What are the business and process metrics that will be impacted?
- Why and how will they be impacted?
- Is this desired impact aligned with the business objective and strategic vision?

The objective of this step is to:

- Clearly articulate the business need and projected impact.
- Outline a clear vision of how the business will use the solution.

Data

The second step is to analyze the available data, internal and external, that can be leveraged to solve the problem and to establish the data infrastructure in order to gather, process, and analyze this data.

The key capabilities to be established in this step are:

- Gathering data from internal and external sources
- Appending key external data
- Building an underlying data infrastructure for data generation, processing, and management.

Many organizations struggle with switching from legacy data systems to a more nimble and flexible architecture for big data. Solving this problem is a foundational step to establishing a robust, transformational analytics capability.

Models

The third step is acquiring analytics capabilities and tools needed to derive insights and value from the data.

Organizations may choose to build these capabilities internally or partner/outsource them to specialists.

The critical components of this step are:

- Applying supervised and unsupervised learning approaches to develop the most suitable analytical model with an agile approach.
- Evaluating various analytical tools; identifying and implementing the right stack for the organization.
- Codifying, validating, and testing the heuristics across the organization.

Integration

The fourth step is the most common stumbling block—changing business processes to integrate data insights into the actual business workflow. This step acts as a bridge between analytical insights and getting them into the hands of the right personnel to make effective data-driven business decisions.

This step involves:

- Redesigning processes to seamlessly embed analytical intelligence.
- Developing an intuitive user interface that is integrated into the day-to-day workflow.
- Automating workflows.

Adoption

The fifth step is extremely critical in driving a data-driven decisioning culture within the organization. Teams need to build the capabilities of executives and mid-level managers to understand how to use data-driven insights as the basis for making decisions.

Successful realization of business value from analytics initiatives and solutions requires personnel to accept and trust the tools, understand how they work, and use them consistently in making decisions. That is why managing the adoption phase effectively is critical to achieving optimal analytics impact.

Outcomes

Finally, organizations need to objectively measure the impact of analytics solutions across the business and process metrics defined during the first stage. This is a critical step, and ironically, the most neglected one.

The ROI or the true value of analytics solutions need to be clearly measured, analyzed, and appropriate investment or correction needs to be made. Measuring the ROI of analytics objectively goes a long way in clearing the clutter of initiatives that don't add value to business performance. This step also enables further investment in the analytics initiative and capabilities that bring in actual transformational business value.

Metrics to measure value at each stage

We cannot measure value without defining the right metrics. An underlying objective of the Value-driven Analytics Framework is to have well-defined metrics at each stage.

Businesses across the globe are primarily run on three key aspects:

- Customer
- Risk
- Operations

A business or technology initiative is valuable only if it directly impacts one of these aspects. At the value stage of the framework, it is important to define the objective of the analytics initiative across at least one of these dimensions. For example, the simple underlying objective of an analytics capability could be improvement of customer engagement.

At the same time, we must also keep the expected outcome in mind. In our example of improving customer engagement, the rate of repeat purchase to be increased by at least xx% in the outcome. These metrics, of course, need to be aligned to strategic and operational objectives.

With the value objective and the outcome metrics set and aligned to one of the three business aspects (customer, risk, and operations), we need to set the evaluation framework across each of the stages from Data to Adoption. Measuring clearly defined metrics across every stage ensures objective value measurement and ability to course correct in an agile manner.

The diagram below states the recommended framework for defining the metrics to measure value across various stages of developing a transformational analytics capability.

Value

Customers
- Increased customer acquisition
- Improved customer engagement
- Reduced customer attrition

Risk
- Mitigated business risk
- Improved regulatory compliance

Operations
- Improved customer service
- Increased ROI & process efficiency

Data

- Data availability and usability
- Data completeness and quality
- Data processing & integration

Models

- Accuracy and stability of analysis models/tools
- Simplicity to consume and act
- Ease of integration with existing process and workflow

Integration

- Actionable intelligence at decision making points
- Cost of disruption
- Cost of change management and training

Adoption

- End-user adoption rate and feedback
- Measurement impact of analysis intervention
- Cost of scale-up (horizontal and vertical expansion)

Outcomes

Customers
- Increase rate of prospect acquisition by xx %
- Improve rate of repeat purchase

Risk
- Reduce credit default rate by xx %
- Reduce count of non-compliant events

Operations
- Improve First Call Resolution rate (FCR)
- Reduce rate of Manual claim adjudication

Through the prism of the Value-driven Analytics Framework

The following questions need to be answered by any organization if they want to assess the value derived from analytics and maximize the ROI from their analytics investment.

What is their business stage and their vision at this stage?

Are they a start-up trying to leverage innovation and disruption to enter the market? Are they a business seeing high growth that wants to build processes and capability to sustain this growth? Or, are they a mature business struggling to transform themselves?

Is the current organizational culture supportive?

How does the current organization culture help in imbibing insights and intelligence in day-to-day business processes and decision-making? Do the front-line sales teams, business operation managers, IT infrastructure personnel, financial analysts, and marketing leads leverage analytics-driven insights to make effective business decisions? Is anyone tracking the ROI of such decisions? Are data-driven business decisions an organizational culture or an after-thought to support the decisions that have already been taken?

What is the current state of analytical maturity of the organization?

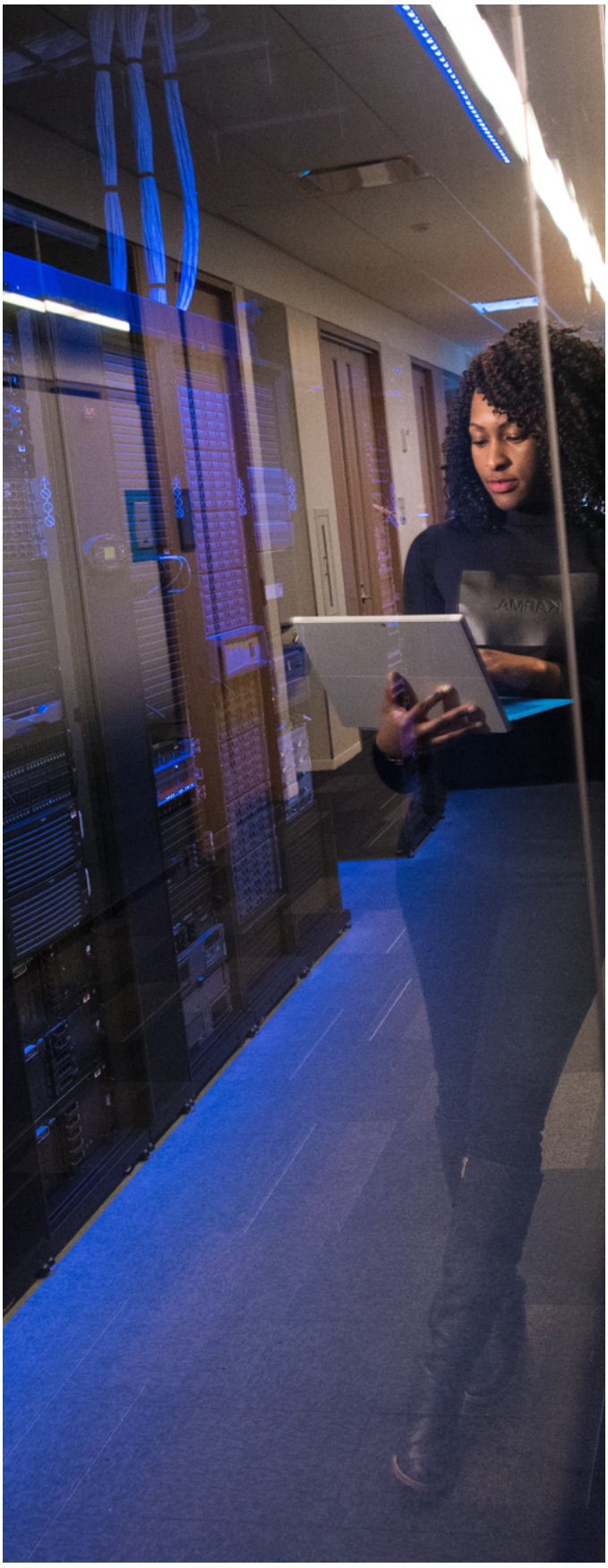
Does the basic data and infrastructure exist and is it being leveraged effectively? Does the analytical capability help derive business insights required to achieve business objectives and organizational vision?

By utilizing the Value-driven Analytics Framework, organizations can evaluate themselves and find answers to these questions in a structured and well-crafted manner.

Conclusion

Weaving analytics into the fabric of an organization and leveraging it to transform business processes is a journey. Several organizations delve into analytics with a siloed approach where analytics initiatives and capabilities are not aligned to a definitive business value. In the absence of a guiding metrics to measure the outcomes, many of these initiatives end up building bridges to nowhere, and result in poor ROI, or are discarded and never undertaken again.

Bringing in a structured process, such as the Value-driven Analytics Framework helps define a purpose and foresee business value. It also helps organizations assess their current level of maturity and set upon a path to achieve business value realization and competitive advantage.



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About Nagarro

Nagarro is a global digital engineering leader with a full-service offering, including digital product engineering, digital commerce, customer experience, AI and ML-based solutions, cloud, immersive technologies, IoT solutions, and consulting on next-generation ERP. We help our clients become innovative, digital-first companies through our entrepreneurial and agile mindset, and we deliver on our promise of thinking breakthroughs.

We have a broad and long-standing international customer base, primarily in Europe and North America. This includes many global blue-chip companies, leading independent software vendors (ISVs), other market and industry leaders, and public sector clients.

Today, we are over 17,000 experts across 32 countries, forming a Nation of Nagarrians, ready to help our customers succeed.