On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order is available through GSA Advantage!, a menu-driven database system. The INTERNET address for GSA Advantage! is http://www.gsaadvantage.gov

SCHEDULE TITLE:  MAS – Multiple Award Schedule

FEDERAL SUPPLY GROUP: Professional Services

CONTRACT NUMBER:  47QRAA20D0093

CONTRACT PERIOD:  September 18th, 2020 through September 17th, 2025

For more information on ordering from Federal Supply Schedules click on the GSA Schedules link at www.gsa.gov

CONTRACTOR:  Logical Design Solutions, Inc.
200 Park Ave Ste 210
Florham Park, NJ 07932
Phone: (973) 971-0100
E-Mail: blovenberg@lds.com

CONTRACTOR’S ADMINISTRATION SOURCE:  Bruce Lovenberg
Phone: (973) 971-0100
E-Mail: blovenberg@lds.com

BUSINESS SIZE:  Woman Owned, Small
CUSTOMER INFORMATION:

1a. TABLE OF AWARDED SPECIAL ITEM NUMBERS (SINs)

<table>
<thead>
<tr>
<th>SIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>541611</td>
<td>Management and Financial Consulting, Acquisition and Grants Management Support, and Business Program and Project Management Services</td>
</tr>
</tbody>
</table>

1b. LOWEST PRICED MODEL NUMBER AND PRICE FOR EACH SIN:

(Government net price based on a unit of one)

<table>
<thead>
<tr>
<th>SIN</th>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>541611</td>
<td>Content Editor</td>
<td>$121.54</td>
</tr>
</tbody>
</table>

1c. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles, experience, functional responsibility and education for those types of employees or subcontractors who will perform services shall be provided. Please see pages 4 – 15.

2. MAXIMUM ORDER: $1,000,000

3. MINIMUM ORDER: $100

4. GEOGRAPHIC COVERAGE: 48 States, DC

5. POINT(S) OF PRODUCTION: USA

6. DISCOUNT FROM LIST PRICES: 3.5%. Prices shown on GSA Advantage are net discounted prices.

7. QUANTITY DISCOUNT(S):

   Qty/Volume Discounts: 1% for individual task orders between $250,000 - $1,000,000 and 3% for individual task orders over $1,000,000"

8. PROMPT PAYMENT TERMS: Net 30 days. Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

9a. Government Purchase Cards are accepted at or below the micro-purchase threshold.

9b. Government Purchase Cards are accepted above the micro-purchase threshold.

10. FOREIGN ITEMS: None

11a. TIME OF DELIVERY: 7 DARO

11b. EXPEDITED DELIVERY: Contact the Contractor for rates.

11c. OVERNIGHT AND 2-DAY DELIVERY: Contact the Contractor for rates.
11d. **URGENT REQUIREMENTS:** Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery.

12. **FOB POINT:** Destination

13a. **ORDERING ADDRESS:** Same as Contractor’s address.

13b. **ORDERING PROCEDURES:** For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA’s) are found in FAR 8.405-3

14. **PAYMENT ADDRESS:** Same as Contractor's address.

15. **WARRANTY PROVISION:** None

15a. **RETURN/RESTOCKING POLICY:** Not applicable.

16. **EXPORT PACKING CHARGES:** Not applicable.

17. **TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARD ACCEPTANCE:** Accepted at, below and above the micro-purchase level

18. **TERMS AND CONDITIONS OF RENTAL, MAINTENANCE, AND REPAIR (IF APPLICABLE):** N/A

19. **TERMS AND CONDITIONS OF INSTALLATION (IF APPLICABLE):** N/A.

20. **TERMS AND CONDITIONS OF REPAIR PARTS INDICATING DATE OF PARTS PRICE LISTS AND ANY DISCOUNTS FROM LIST PRICES (IF AVAILABLE):** N/A

20a. **TERMS AND CONDITIONS FOR ANY OTHER SERVICES (IF APPLICABLE):** N/A

21. **LIST OF SERVICE AND DISTRIBUTION POINTS (IF APPLICABLE):** N/A

22. **LIST OF PARTICIPATING DEALERS (IF APPLICABLE):** N/A

23. **PREVENTIVE MAINTENANCE (IF APPLICABLE):** N/A

24a. **SPECIAL ATTRIBUTES SUCH AS ENVIRONMENTAL ATTRIBUTES (e.g. recycled content, energy efficiency, and/or reduced pollutants):** N/A

24b. **Section 508 Compliance for electronic and information technology (EIT):** as applicable

25. **DUNS NUMBER:** 787347418

26. **NOTIFICATION REGARDING REGISTRATION IN SYSTEM FOR AWARD MANAGEMENT (SAM) DATABASE:** Contractor has an Active Registration in the SAM database.
<table>
<thead>
<tr>
<th>Labor Category Title</th>
<th>Minimum Education</th>
<th>Minimum Years of Experience (cannot be a range)</th>
<th>Unit of Issue (e.g. Hour, Task, Sq Ft)</th>
<th>Price Offered to GSA (including IFF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Sponsor</td>
<td>PhD</td>
<td>35</td>
<td>Hour</td>
<td>$388.92</td>
</tr>
<tr>
<td>Executive Consultant</td>
<td>PhD</td>
<td>25</td>
<td>Hour</td>
<td>$291.69</td>
</tr>
<tr>
<td>Engagement Manager</td>
<td>PhD</td>
<td>20</td>
<td>Hour</td>
<td>$291.69</td>
</tr>
<tr>
<td>Digital Architect</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$291.69</td>
</tr>
<tr>
<td>Sr. Engineer / Architect</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$267.38</td>
</tr>
<tr>
<td>Sr. Business Consultant</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$267.38</td>
</tr>
<tr>
<td>Knowledge Strategist</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$267.38</td>
</tr>
<tr>
<td>Sr. UX Consultant</td>
<td>Masters</td>
<td>20</td>
<td>Hour</td>
<td>$267.38</td>
</tr>
<tr>
<td>Sr. Designer</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$243.07</td>
</tr>
<tr>
<td>UX Consultant</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$218.77</td>
</tr>
<tr>
<td>Content Consultant</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$218.77</td>
</tr>
<tr>
<td>Business Consultant</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$218.77</td>
</tr>
<tr>
<td>Sr. Engineer</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$209.04</td>
</tr>
<tr>
<td>Visual Designer</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$209.04</td>
</tr>
<tr>
<td>Content Editor</td>
<td>Masters</td>
<td>15</td>
<td>Hour</td>
<td>$121.54</td>
</tr>
</tbody>
</table>
LABOR CATEGORY DESCRIPTIONS

EXECUTIVE SPONSOR

General Responsibilities:

- Executive control with client relationships and manages client expectations and scope of work
- Outlines expectations for internal teams, including working cadences, approaches and methodologies, and additional internal requirements for success
- Leads all additional business discovery activities with existing relationships as well as relationship building with potential new clients
- Coaches and guides internal cross-disciplinary team in order to achieve all strategic deliverables.
- Leads marketplace framework creation and analysis.
- Facilitates internal Sponsor and Executive leadership meetings

Education:
- PHD

Experience:

- Minimum 35 years of hands-on industry work, management of projects and teams, and industry-provoking thought leadership
- Has experience strategically partnering with C-suite executives from enterprise level organizations
- Proven ability to coach and grow multidisciplinary members – understands mentoring talent and how to scout new talent with potential.
- Experience driving thought leadership, new frameworks and approaches.

EXECUTIVE CONSULTANT

General Responsibilities:

- Responsible for overarching engagement approach
- Oversees client relationships and manages client expectations and scope of work
- Leads all current project and phase planning, additional business discovery activities.
- Coaches and guides internal cross-disciplinary team in order to achieve all strategic deliverables.
- Leads marketplace framework creation and analysis.
- Facilitates internal Sponsor and Executive leadership meetings

Education:
- PHD

Experience:

- Minimum 25 years of hands-on industry work, driving teams and leading projects, preferably with experience in management consulting
- Has experience strategically partnering with C-level executives from enterprise level organizations.
• Proven ability to coach and grow multidisciplinary members – understands mentoring talent and how to scout new talent with potential.
• Experience driving thought leadership, new frameworks and approaches.

ENGAGEMENT MANAGER

General Responsibilities:

• Overarching responsibility for detailed project planning for delivery of scope of work as well as control over resource and operational coordination
• Works closely with the client central point of contact to resolve issues and ensure internal teams are aligned in activities and resource planning
• Leads managing the overall engagement phase schedule and budget from kick off to completion
• Ensure project contract scope of work is executed correctly on time and on budget

Education:

PHD

Experience:

• Minimum 20 years of hands-on industry work, particularly with experience in management consulting for enterprise organizations
• Has experience strategically partnering with C-level executives from enterprise level organizations
• Proven ability to coach and grow multidisciplinary members – understands mentoring talent and how to scout new talent with potential.
• Experience driving complex project plans with swift deadlines in fast-paced environments
• Strong organizational abilities and experience managing complex projects with multiple phases and deadlines

DIGITAL ARCHITECT

General Responsibilities:

• Reconcile and interpret the roadmap, ecosystem member capabilities, organizational capabilities and other digital initiatives to translate and synthesize plans in order to realize the Experience vision
• Provide architectural perspectives / insights as part of a multidisciplinary consulting team on our Fortune 500 clients’ digital strategies.
• Plan, design and realize consumer grade digital solutions that enable business capability and objectives through technology
• Partner with IT leaders and other resources to apply enterprise IT strategy as it relates to business and worker/employee experience needs (i.e., business consumer needs and expectations)
• Establish and negotiate principles of interoperability among business and IT stakeholders
• Create and apply problem-solving frameworks to clarify issues and support decision making
• Reason from top / down where business strategy and digital strategy inform how we think about enabling technology
• Work with business and IT stakeholders to define a future-state vision in terms of requirements, principles including models for digital, machine learning, data and analytics
• Effectively position our clients to deliver their future-state vision by navigating complex business and digital requirements to align technology capabilities
• Analyze enterprise business strategies and market trends to determine their potential impacts on our clients’ business and information architecture

Education:
• Masters

Experience:
• Minimum 15 years of experience, preferably in an IT or management consulting firm.
• A continuous learning drive to understand industry technology trends and their effect on the enterprise technology landscape.
• An ability to formulate and present strategic points of view on relevant industry trends and enterprise digital strategy.
• Excellent communication and presentation skills with a high degree of ability to communicate complex forward-leaning technology concepts to business leaders in large enterprises.
• Proven consulting skills that included active-listening, tact, negotiation and an ability to influence through fact-based reasoning.

SENIOR ENGINEER / ARCHITECT

General Responsibilities:

• Understand and apply software engineering methodology and operations expertise to interpret the roadmap, ecosystem member capabilities, organizational capabilities and other digital initiatives to translate and synthesize plans in order to realize the Experience vision.
• Provide architectural perspectives / insights as part of a multidisciplinary consulting team on our Fortune 500 clients’ digital strategies.
• Create and apply problem-solving frameworks to clarify issues and support decision making.
• Reason from top / down where business strategy and digital strategy inform how we think about enabling technology.
• Effectively position our clients to deliver their future-state vision by navigating complex business and digital requirements to align technology capabilities.
• Analyze enterprise business strategies and approaches to actualize foundational capabilities via the platforms and technologies available in the ecosystem.

Education:
• Masters

Experience:
• Minimum of 15 years of experience in an IT or Management consulting firm.
• A continuous learning drive to understand industry technology trends and their effect on the enterprise technology landscape.
• An ability to formulate and present strategic points of view on relevant industry trends and enterprise digital strategy.
• Excellent communication and presentation skills with a high degree of ability to communicate complex forward – leaning technology concepts to business leaders in large enterprises
• Proven consulting skills that included active-listening, tact, negotiation and an ability to influence through fact-based reasoning

SENIOR BUSINESS CONSULTANT

General Responsibilities:

• Drive business and organizational analysis to inform strategy, scope, design and business implications.
• Research and analyze industry and emerging trends to support the employee experience, work optimization strategic governance and change needs.
• Assess business strategies, goals, programs and operations by evaluating current work design and proposing changes in support of digital strategies.
• Model business concepts and identifying innovation opportunities
• Translate analysis into business-centered solution models and requirements, including organizational development and new work design
• Create the business-centered functional models and descriptions in order to drive design
• Effectively define the business context and ecosystems in which digital enterprise solutions exist
• Evaluate client information to be able to summarize and model its strategy, goals, programs and operations
• Lead discussions on strategy, business design and solution requirements and drive business solutions that support business strategy

Education:
• Master

Experience:

• Minimum of 15 years of experience, preferably managing clients within a Management Consulting firm
• Proven experience leading strategic discussions on strategy and enterprise business design
• Experience facilitating client meetings as well as stakeholder interviews with large enterprise global organizations
• Established creative thinker and problem solver with a strong analytical mindset
• A drive to pay a role in internal team leadership with exceptional interpersonal and communications skills
• Work effectively and independently with C-suite executives, solution stakeholders and SMEs, as well as with consultants in other LDS disciplines (e.g., user experience, technology architecture, content strategy, visual design).

KNOWLEDGE STRATEGIST

General Responsibilities:
• Leads knowledge needs analysis to inform necessary design inputs and considerations that factor into a digital experience strategy for clients.
• Guides the approach and considerations for people analysis/research to inform necessary people considerations and inputs relative to the digital strategy.
• Seamlessly translates client business needs, user requirements, technology considerations and content strategies into a holistic experience strategy.
• Facilitates design sessions and uses iterative design techniques to synthesize findings and feedback into an informed experience strategy and design.
• Collaborates with team members across multiple disciplines to define the people value relative to business value, balance technical complexity with digital first design, and understands considerations and approach for designing for desired behaviors in the future state.
• Presents the design strategy’s intent, behaviors, and rationale to client executives and senior stakeholders.

Education:
• Master

Experience:
• Minimum of 15 years of experience in strategy at an agency or Management consulting firm.
• A continuous learning drive to understand industry trends and their effect on the enterprise landscape
• Proven consulting skills that included active-listening, tact, negotiation and an ability to influence through fact-based reasoning

SENIOR UX CONSULTANT

General Responsibilities:

• Focus on experience strategy and design analysis to inform necessary design inputs, contexts, requirements and considerations that factor into a digital experience strategy for clients.
• Guides the approach and considerations for people analysis/research to inform necessary people considerations and inputs relative to the digital strategy.
• Seamlessly translates client business needs, user requirements, technology considerations and content strategies into a holistic experience strategy.
• Facilitates design sessions and uses iterative design techniques to synthesize findings and feedback into an informed experience strategy and design.
• Collaborates with team members across multiple disciplines to define the people value relative to business value, balance technical complexity with digital first design, and understands considerations and approach for designing for desired behaviors in the future state.
• Supports the employee experience track and presents the intent, behaviors, and rationale to client executives and senior stakeholders.
• Play an active role the design community and within the company by contributing design standards and thought leadership on innovation, design methodology and best practices

Education:
• Master

Experience:
Minimum of 20 years of hands-on user experience work with a deep analytical approach to designing responsive sites, products and mobile apps.

Has experience designing highly strategic and complex experiences that dwarf your everyday run-of-the-mill marketing websites.

Translates business requirements into thoughtful design principles and experience frameworks.

Is accustomed to contributing in multiple capacities and is comfortable working in cross-discipline, collaborative team and client environments.

Is a natural leader, who can advocate for good design outcomes and manage junior designers in supporting design research and execution.

Challenges and inspires other design team members to continually to innovate and raise the bar.

SENIOR DESIGNER

General Responsibilities:

- Supports projects from start to finish, beginning with low fidelity wireframes and ultimately achieving high fidelity visual designs and clickable prototypes
- Applies industry and LDS best practices to bridge clients’ strategic business goals and user needs across digital platforms
- Helps facilitate usability sessions as a means to validate designs, capture constituent feedback and inform future design iterations and enhancements
- Delivers executive-level design presentations, connecting the dots between business goals, user needs, and design outcomes for senior leadership and key stakeholders
- Comfortable collaborating with multi-disciplined consultants including experience designers, content strategists, business analysts, architects, and technologists who collaborate intensely on every phase of a solution, from initial strategy to execution
- Provides creative leadership to the design team: works closely with client stakeholders, including C-suite executives
- Play an active role the design community and within the company by contributing design standards and thought leadership on innovation, design methodology and best practices

Education:
- Masters

Experience:

- Minimum of 15 years of hands-on design experience and a deep analytical approach to designing responsive sites, products and mobile apps
- Has experience designing highly strategic and complex experiences that dwarf your everyday run-of-the-mill marketing websites
- Translates business requirements into thoughtful design principles and experience frameworks
- Factors things like metrics, business intelligence, and use-case scenarios and other relevant data to design highly personalized and variable user interfaces
- Knows how to adhere to a brand standards guide or design system and can turn on a dime and create one when needed
- Possesses excellent visualization capabilities with attention to detail and brings concepts to life through storyboards, mood boards, personas, and user journeys
• Is accustomed to contributing in multiple capacities and is comfortable working in cross-discipline, collaborative team and client environments
• Has deep expertise in the use of the industry’s top design tools such as Adobe Creative Suite, Envision, Sketch, and Axure
• Is a natural leader, who can advocate for good design outcomes and manage junior designers in supporting design research and execution
• Challenges and inspires other design team members to continually to innovate and raise the bar.

UX CONSULTANT

General Responsibilities:

• Focuses on experience strategy and design analysis to inform necessary design inputs, contexts, requirements and considerations that factor into a digital experience strategy for clients.
• Supports the approach and considerations for people analysis/research to inform necessary people considerations and inputs relative to the digital strategy.
• Collaborates to incorporate client business needs, user requirements, technology considerations and content strategies into a holistic experience strategy.
• Participates in design sessions and uses iterative design techniques to synthesize findings and feedback into an informed experience strategy and design.
• Collaborates with team members across multiple disciplines to define the people value relative to business value, balance technical complexity with digital first design, and understands considerations and approach for designing for desired behaviors in the future state.
• Supports the employee experience track and focuses on the intent, behaviors, and rationale to client executives and senior stakeholders.

Education:
• Masters

Experience:

• Minimum of 15 years of hands-on user experience work with a deep analytical approach to designing responsive sites, products and mobile apps
• Has experience designing highly strategic and complex experiences that dwarf your everyday run-of-the-mill marketing websites
• Translates business requirements into thoughtful design principles and experience frameworks
• Is accustomed to contributing in multiple capacities and is comfortable working in cross-discipline, collaborative team and client environments
• Challenges and inspires other design team members to continually to innovate and raise the bar.

CONTENT CONSULTANT

General Responsibilities

• Supports knowledge-needs analysis process to inform design inputs and considerations that factor into a digital experience strategy.
• Applies the approach and considerations for people analysis/research to inform necessary people considerations and inputs relative to the digital strategy.
Participates in design sessions and uses iterative design techniques to synthesize findings and feedback into an informed experience of strategy and design.

Collaborates with team members across multiple disciplines to define the people value relative to business value, balance technical complexity with digital first design, and understands considerations and approach for designing for desired behaviors in the future state.

**Education:**
- Masters

**Experience:**
- Minimum of 15 years of experience in strategy at an agency or Management consulting firm.
- A continuous learning drive to understand industry trends and their effect on the enterprise landscape
- Proven consulting skills that included active-listening, tact, negotiation and an ability to influence through fact-based reasoning

**BUSINESS CONSULTANT**

**General Responsibilities:**
- Documents current state, develops asset inventory, and documents current processes and procedures that support the client’s ecosystem.
- Informs the design team of significant factors as future state is developed
- Assess business strategies, goals, programs and operations by evaluating current work design and proposing changes in support of digital strategies.
- Model business concepts and identifying innovation opportunities
- Helps create the business-centered functional models and descriptions in order to drive design
- Effectively define the business context and ecosystems in which digital enterprise solutions exist
- Evaluate client information and is able to summarize and model its strategy, goals, programs and operations

**Education:**
- Masters

**Experience:**
- Minimum of 15 years of industry experience, preferably within Management Consulting
- Has experience participating in internal and client meetings as well as stakeholder interviews with large enterprise global organizations
- Established creative thinker and problem solver with a strong analytical mindset
- Understands complex enterprise-level business ecosystems
- Experience documenting and compiling asset inventory for enterprise-level businesses
SENIOR ENGINEER

General Responsibilities:

- Develop HTML/CSS mock-ups that tightly adhere to design strategy concepts
- Provide counsel to internal cross-disciplinary team to ensure strategy, creation, and implementation are actualized for our clients’ digital strategies.
- Create and apply problem-solving frameworks to clarify issues and support decision making
- Assist in design quality assurance and testing
- Deliver mockups to implementation team

Education:
- Masters

Experience:
- Minimum of 15 years of experience in an IT or Management consulting firm.
- A continuous learning drive to understand industry technology trends and their effect on the enterprise technology landscape
- Proven consulting skills that included active-listening, tact, negotiation and an ability to influence through fact-based reasoning

VISUAL DESIGNER

General Responsibilities:

- Support our Senior Directors aby developing visualizations to illustrate key experience concepts
- Convey the most appropriate layout, typography, color theory and visual design best practices to deliver consumer-grade user interface design
- Exhibit knowledgeable user experience (UX) capabilities and sensibilities; pursue creative and innovative solutions experimenting with new design ideas while leveraging emerging digital-first technologies
- Collaborate with multi-disciplinary team members, including business analysts, solutions architects and content strategists under the leadership of our digital design director
- Create the visual design strategy, brand and experience on client engagements, and manage the creation of visual design on various initiatives
- Be client-facing, especially over time as you become familiar and comfortable with our client engagement practices
- Participate in the industry – keeping a finger on the pulse of design and technology trends relevant to your development and our industry. We are a continually learning organization and expect our people to pursue new ideas and stay connected (on our time and on yours).

Education:
- Masters

Experience:
• Minimum of 15 years of hands-on design experience and a deep analytical approach to designing responsive sites, products and mobile apps
• Has experience on a team dedicated to crafting highly strategic and complex experiences
• Factors things like metrics, business intelligence, and use-case scenarios and other relevant data to design highly personalized and variable user interfaces
• Knows how to adhere to a brand standards guide or design system and can turn on a dime and create one when needed
• Possesses excellent visualization capabilities with attention to detail and brings concepts to life through storyboards, mood boards, personas, and user journeys
• Is accustomed to contributing in multiple capacities and is comfortable working in cross-discipline, collaborative team and client environments
• Has expertise in the use of the industry’s top design tools such as Adobe Creative Suite, Invision, Sketch, and Axure
• Participates and collaborates with other design team members to continually to innovate and raise the bar.

CONTENT EDITOR

General Responsibilities:
• Responsible for all aspects of content, including evaluation, analysis, development, design and production.
• Supports knowledge needs analysis process to inform design inputs and considerations that factor into a digital experience strategy.
• Applies the approach and considerations from conducted analysis to inform necessary considerations and inputs relative to the digital strategy.
• Participates in design sessions and helps synthesize findings and feedback into relevant and articulate content that feeds the employee experience.
• Collaborates with team members across multiple disciplines to define the people value relative to business value, balance technical complexity with digital first design, and understands considerations and approach for designing for desired behaviors in the future state.

Education:
• Masters

Experience:
• Minimum of 15 years of experience developing content, preferably at an agency or Management consulting firm.
• A continuous learning drive to understand industry trends and their effect on the enterprise landscape
• Proven consulting skills that include active-listening, tact, negotiation and an ability to influence through fact-based reasoning