

The AI ROI Cheat Sheet

4 Simple Frameworks for Measuring and Ensuring AI ROI

by
Daniel Faggella

About Emerj Artificial Intelligence Research

Emerj Artificial Intelligence Research is where executive leaders turn to understand how AI is impacting their organization or industry – and what to do about it. We're the industry source for authoritative market research and competitive intelligence for the business applications of artificial intelligence.

Our objective, jargon-free research and industry overviews are designed to give executives and decision-makers exactly what they need for competitive insight, informed AI technology procurement and strategic planning around AI.

With a finger on the pulse of academia, Fortune 500s, and the global artificial intelligence startup ecosystem, organizations call upon us for insight and research for their most important AI-related strategic decisions.



Through our [AI Opportunity Landscape research](#), we help clients win market share and make more profitable decisions – with a firm grounding in the current realities of the AI landscape.

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“So what kind of ROI can we expect here?”

Anyone selling or bringing AI into the enterprise – whether an internal innovation leader or an external AI services vendor – has heard this question all too often.

In our enterprise [AI Opportunity Landscape research](#) we score companies across nearly a dozen proprietary Emerj AI application scores, but the C-suite is always most eager to race to our *Evidence of ROI* score.

The process of measuring and determining AI ROI is a living, breathing process - something that evolves as a project develops, and as initial hypotheses are tested.

In this quick cheat sheet guide, I'll break down four frameworks and checklists that will help you to make the business case for AI.

By no means are these resources intended to be exhaustive, nor are they the only possible approach to measuring and conveying AI ROI - but they're fast and effective tools that we've developed by speaking directly with AI leader at global enterprises (Raytheon, Comcast, Gieko, etc), and with the founders of AI firms with successful sales pipelines and strong enterprise adoption (Fractal Analytics, IBM, etc).

I hope this resource is able to serve you and your clients well in the year ahead, and wishing you luck and perseverance on your journey to AI transformation.

Best,



- **Daniel Faggella**
Founder, Head of Research
Emerj Artificial Intelligence Research



Introduction

This guide is intended to help internal innovation leaders or outside AI consultants to (a) determine the right ROI measures for an AI project, (b) predict or forecast ROI with as much accuracy as one could reasonably expect, and (c) convey that ROI case to leadership.

In the remainder of this guide, we'll cover three types of return on investment for AI projects:

1. Measurable (Financial and Qualitative)
2. Strategic
3. Capability

Each section will begin with a definition of the ROI type, and three critical distinctions for using the ROI type in practice. Below that, each of the short sections below will include one or two frameworks, tables, or checklists for putting the ideas in practice in real AI projects.



Measurable ROI

Definition: The return on investment derived from improving immediately measurable (usually financial) metrics.

Critical distinctions:

1. Anchor all projects in some kind of measurable value, but be prepared to be nimble in recalibrating measurable ROI targets as a project evolves. Set the expectation with stakeholders that these measures will adjust as the project matures, and as new discoveries are made.
2. Any embedded business process that isn't being measured now may well never be able to be measured reliably. It is dangerous to assume that a currently unmeasured workflow - or portion of a workflow - will be easy to measure. If a measure can't be quickly benchmarked during a pilot, it's often best to assume that it will be near-impossible to reliably use it as a data point to attribute improvement.
3. Measurable ROI is most attainable for use-cases that have strong existing precedents of use. If there are startups with tremendous AI talent and millions in venture money who haven't successfully solved the problem you're trying to solve, be skeptical about the near-term results you can generate.

How to follow the table below:

1. Create a complete list of the business processes to be impacted by this specific AI deployment.
2. Create a complete list of the portions of the workflow to be impacted by artificial intelligence.
3. Determine the best measurable ROI type from the list below:
 - a. Measurable (Financial)
 - i. Time reduction
 - ii. Cost reduction
 - iii. Conversion rate to sale
 - iv. Improved customer lifetime value
 - v. Improving Retention / churn reduction
 - vi. Reducing risk
 - b. Measurable (Qualitative)
 - i. Employee satisfaction
 - ii. Customer satisfaction
 - iii. (Other)

Note: Collect as many measurable elements as possible. Some will prove to be useless, some will be impossible to attribute, others will prove essential. Collect a maximum number of ideas upfront and cull from that list to determine the essential measures.



Measurable ROI table:

Business Process	1. Customer Service Chat Reply/Routing	2. Example
Part of Workflow	Receiving inbound chat messages to AI system, not agent	
Measurable Factor	<i>Cost reduction.</i> Less overhead needed to respond to low-hanging fruit questions, or to manually route chat messages.	
Measurable Factor	<i>Customer satisfaction.</i> Immediate answers to simple questions, and proper	
Measurable Factor	Etc.	
Part of Workflow		
Measurable Factor	Etc.	
Measurable Factor	Etc.	
Measurable Factor	Etc.	
Part of Workflow	Etc.	
Measurable Factor	Etc.	
Measurable Factor	Etc.	
Measurable Factor	Etc.	

Note: During this brainstorm phase it is often useful to consider challenges to measurement, or potential challenges to deployment that may impact measurements. For example: A conversational interface for handling customer service chat questions may reduce the need to front-line chat response staff, but it may require a new cross-functional data science team for customer service.

Note: The measurable ROI values listed above come directly from our longer AI Strategy Report titled: [Generating AI ROI - Best Practices and Frameworks](#).



Strategic ROI

Definition: The return on investment derived from moving an organization closer to long-term profitability and market advantage.

Critical distinctions:

1. Strategic value is the most critical value for longevity of an AI project. You can close a deal with short-term ROI promises, but early ROI predictions are difficult moving targets. Inevitable adoption and deployment challenges will require a deeper motive than quick and short-term gain - as the wrong expectations can get a project cancelled.
2. A strategic “anchor” is a connection to some kind of strategic value in the eyes of one of your key stakeholders. The more strategic anchors the better. Ask about long-term goals, ask about a company’s vision for winning market share in the long-term, ask about anything that will draw out potential anchors to tie AI’s value to. It is almost never advisable to sell AI based on short-term gain alone, and it is almost never advisable to appeal only to the first strategic anchor that a client mentions. Collect a variety and pick from the best.
3. Strategic long-term vision buy-in from your champion, but the higher up the organization you can build a co-created strategic vision/understanding the better. If a VP is able to sign off on an AI initiative, but their boss has the ability to cancel that project 2 months in,

How to follow the table below:

Determine the key strategic priorities from any relevant stakeholders. In the table below, we’ve listed some of our recommended strategic anchors, including:

- *3-5 Year Goals:* The concrete long-term objectives of the company (this could be growth targets, new product releases, etc).
- *Digital Transformation Vision:* The company’s goals for overall digital transformation. These goals likely already align with budgets for other various IT, process, or data-related initiatives already underway.
- *Company Differentiators:* The differentiating factors that a company believes to be critical to their growth, profitability, and/or market share.
- *Key Thrusts:* Existing projects and priorities - often for the quarter or the year. Key thrusts already have budget, teams, and executive attention dedicated to them.
- *Personal:* Strategic value for an individual stakeholder. For example, a VP may be eager to deploy AI in order to better position him/herself for career advancement.

Note: Different clients vary in terms of how they measure and determine strategic value, so be prepared to extend the list we’ve provided. Advice for both external AI consultants and internal innovation leaders: Don’t be afraid to suggest or recommend strategic value



opportunities if you see them. Listening is important, but so is identifying synergies and value that existing stakeholders might have missed.

Collect a full array of strategic values from all relevant stakeholders, and then rank them each on a 1-10 scale by:

- Their relative importance in moving the project forward or closing the deal
- Your ability to meaningfully impact them with the AI initiative

Finding the areas with high “client importance” and “ability to impact” scores will help to narrow down the values to emphasize in making the business case.

Strategic ROI table:

Strategic Anchor	Stakeholder 1: Jane Stephens - VP Analytics, Commercial Banking	Stakeholder 2:
3-5 Year Goals		
<i>Client importance (1-10)</i>		
<i>Ability to impact (1-10)</i>		
Company Differentiators		
<i>Client importance (1-10)</i>		
<i>Ability to impact (1-10)</i>		
Digital Trans. Vision		
<i>Client importance (1-10)</i>		
<i>Ability to impact (1-10)</i>		
Key Thrusts		
<i>Client importance (1-10)</i>		
<i>Ability to impact (1-10)</i>		
Personal		
<i>Client importance (1-10)</i>		
<i>Ability to impact (1-10)</i>		
(Other...)		



Capability (Learning) ROI

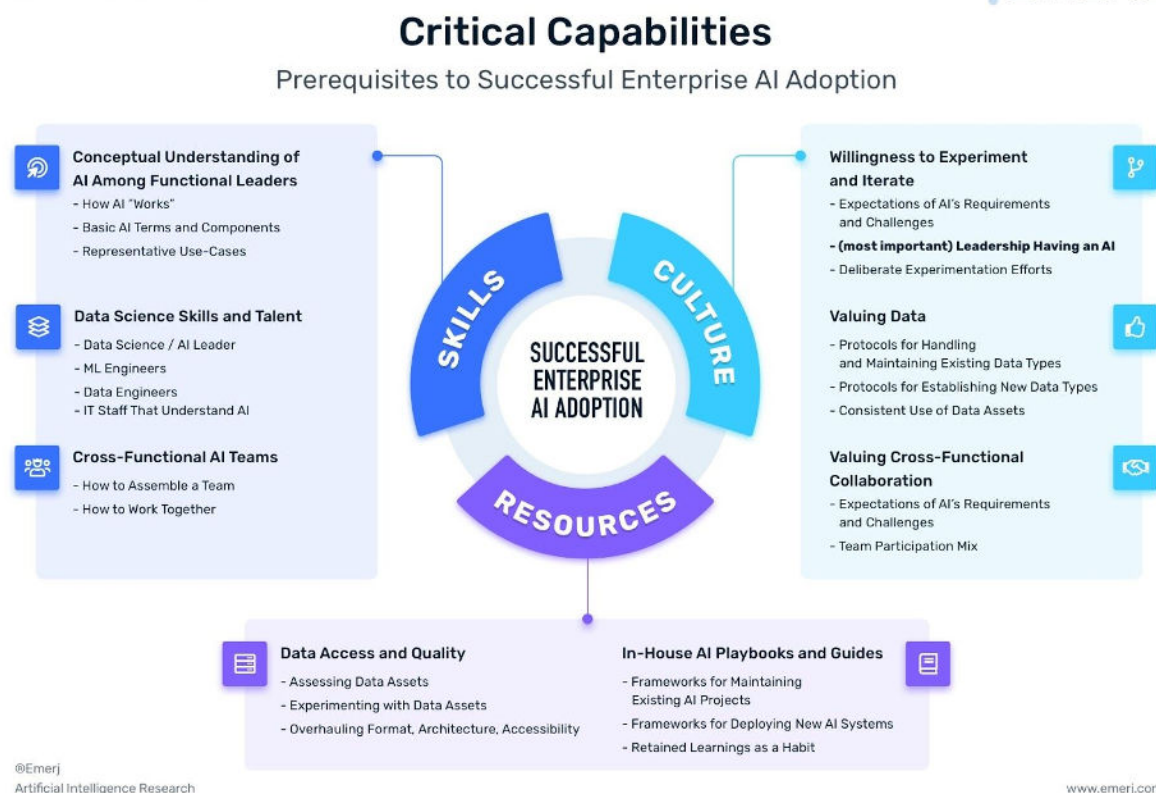
Definition: The return on investment derived from developing the necessary resources, culture, and skills required to support successful enterprise AI.

Critical distinctions:

1. AI maturity is often the single biggest hurdle to AI adoption in an enterprise firm.
2. Framing AI maturity as a kind of ROI unto itself is critical to selling AI services, and to maintaining a long-term engagement.
3. Collaboratively developing a set of AI capability improvement outcomes is the best way to turn the drudgery of AI maturity (overhauling data infrastructure, educating SMEs, etc) into a benefit.

Emerj's Critical Capabilities Framework:

Research | Strategy | Competitive Intelligence



This framework breaks down AI maturity (i.e. the prerequisites of successful AI deployment) into three capability categories: Skills, Resources, and Culture - each representing 2-3 related capabilities. Each of the 8 capabilities includes 2-3 sub-capabilities which can be developed individually or in tandem.



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How to use the resources below:

We recommend beginning by reading our full article: [Critical Capabilities - Prerequisites to AI Deployment](#). The context gained by using the image above, and the insights in that full article, will help significantly in framing AI's deployment hurdles as new capabilities to be developed.

AI projects should include Capability ROI targets, so that regardless of the financial ROI of a project, the company can walk away with data understood, culture shifted (even if just slightly), data infrastructure improved, leaders educated, and other lessons learned.

Capabilities ROI questionnaire 1: Internal Assessment

Some of these questions can be assessed after a number of tertiary interactions with the client, but most of them will require some open dialogue with multiple client stakeholders. These questions are useful starting points for assessing a company or department's AI maturity, but this list of questions is not intended to be exhaustive or set in stone:

Skills

- Conceptual Understanding of AI Among Functional Leaders
 - How well does leadership understand how AI works (and how AI is different from IT)?
 - How well does leadership understand AI use-cases in their industry?
- Data Science Skills and Talent
 - Does the company/department have in-house data science expertise?
 - How well does the in-house expertise of the company/department understand the context of the business problem we're working on?
- Cross-Functional AI Teams
 - Does the company/dept have protocols of bringing together SMEs, IT, and AI talent to solve AI problems?
 - Does the company/dept have SMEs, IT, and AI talent available to be dedicated (part-time or full time) to the project at hand?

Resources

- Data Access / Quality
 - Are we able to access (legally, physically) the data we think will be required for the range of projects we're considering?
 - Are the most important data sources harmonized, uniform, and [relatively clean](#)?
- In-House AI Playbooks and Guides
 - Does the company have a set of guides or collections of lessons learned from previous AI projects or deployments?
 - Are there any such guides or best practices for any of the specific AI projects we're currently considering?



Culture

- Willingness to Experiment and Innovate
 - Are experimentation and iteration normal parts of company culture, or is the company more conservative with technology investments?
 - What portions of the company have leeway for R&D-like investments?
- Valuing Data
 - Is data management, governance, or storage an important part of the culture of the company/dept?
- Valuing Cross-Functional Teams
 - Does the company/dept understand the need for hands-on cross-functional AI teams?
 - Does the company/dept have the budget or human resources to dedicate team members to this AI project?

Some internal innovation leaders have found it useful to score clients on a 1-10 scale on each of the Critical Capabilities. We've found that it's often just as valuable to have a rich (and recorded) qualitative understanding of where a client stands in terms of AI maturity.



Capabilities ROI table:

Capability-building is an investment that rarely pays off in the short-term. Framing “AI maturity” as a win, and not as a hurdle and frustration, is critical for ensuring long-term support and success of AI projects. The only enterprises who will successful

After going through the Strategy ROI table, and scoring the various strategic anchors from that exercise - take the more important quartile of strategic anchors and pair each of them with a related

Strategy Anchor	Capability ROI
3-5 Year Goal: 50% of Revenue from eCommerce Channels	Data Access / Quality: Improving the cleanliness and accessibility of our CRM and transactional data will help personalize our web, mobile, and email promotions, helping us to achieve our 50% eCommerce goal by 20XX.
Company Differentiation: ...	
Key Thrusts: ...	
Etc...	
Etc...	
Etc...	

Note: Clients won't make the connection between Strategic ROI and Capabilities ROI on their own. The onus is on the catalyst (internal innovation leader or external AI consultant/advisor) to connect the dots between strategy anchors and growing AI capabilities to present the combination of the two as one of the net wins of the project, not as purely a cost, a hurdle, or a frustration to speedy short-term results.



Build Trust, Land and Expand More AI Deals

An "AI Catalyst" is someone who acts as the driving force for AI transformation within an industry.

AI consulting and AI services leaders are among the most important AI Catalysts in the business ecosystem. While enterprises want to adopt AI, they often don't know how. While enterprises want to build and deploy AI, they need outside help - and outside services partners become a critical factor in the success or failure of these early initiatives.

At Emerj, we've spent years providing catalysts with articles, research, and white papers - through our free newsletters and our Emerj Plus subscription...

...but some consulting CEOs and leaders are looking for more hands-on guidance to help them close deals and convey the business value of AI to their enterprise clients. These leaders want to **land** new deals, and **expand** existing partnerships into lucrative, mutually beneficial long-term AI transformation relationships.

We created Catalyst to help consulting and services leaders do just that:



Learn more about the AI Catalyst program and submit your application:

www.emerj.com/catalyst

