



Special Table: Top Private E&Ps by Production - PG. 13

Select Stories

North American E&P | Gas not as oversupplied as market indicates, Range says

North American E&P | Matador to make a U-turn to drive capital efficiency

North American Deals & Finance | Callon doubles down on Delaware as it bows out of Eagle Ford

North American Deals & Finance | Crescent taking the wheel from partner Mesquite for \$600MM

North American Deals & Finance | FireBird II takes flight with \$500MM and new wingman Quantum

North American Deals & Finance | Pioneer's Sheffield out, bolt-ons and acreage trades still in

International | Exxon & partners sanction \$12.7B, 250 Mbo/d Uaru off Guyana

Section Index	PG.
North American E&P	3
North American Deals & Finance	17
International	21
Recurring Tables & Graphs	PG.
Eastern Regional Data	3
Gulf Coast Regional Data	7
Mid-Continent Regional Data	9
Permian Regional Data	10
Rockies Regional Data	12
U.S. Upstream Industry Overview	15
U.S. Deal Activity at a Glance	16
Upstream Stock Movers	20
Listings	25

Appalachian E&Ps see opportunities for savings later this year

Natural gas prices have been trending downward since last August, with Henry Hub spot dropping from over \$9/MMBtu to around \$2/MMBtu. Enverus Intelligence® | Research's most recent monthly Macro Forecaster report predicts continued weakness, with Nymex gas averaging around \$2.50 this summer and remaining in the \$2.50-\$3.00 range until winter 2024-2025. These price levels will inevitably drive a reduction of activity in gas-focused plays. However, some public companies operating in the Appalachian Basin see a silver lining, predicting that softening demand for oilfield services and materials will drive cost reductions in the back half of this year.

"Year-to-date in 2023, we have seen the price of rigs and pumping crews start to show signs of receding slightly," Range Resources COO Dennis Degner told investors April 25, echoing comments he made on the company's previous earnings call amid announcements from U.S. operators that they were slowing their drilling programs to maintenance level. "Next-generation pumping crews continue to be in high demand, but the availability of traditional spot crews and drilling rigs has increased." [Read more...](#)

Total exits oil sands in C\$5.5B blockbuster sale to Suncor

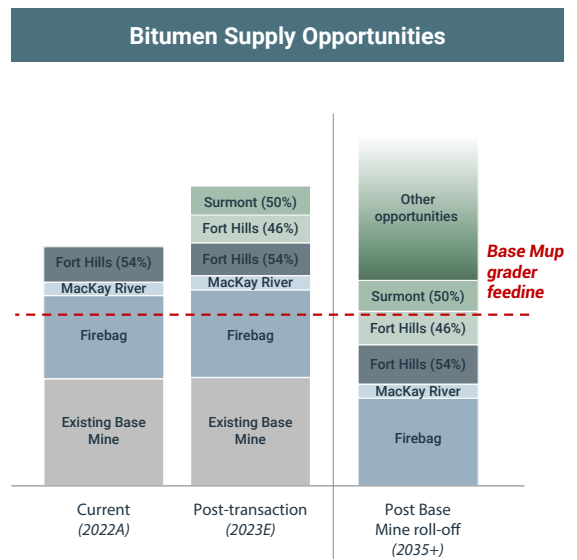
Suncor Energy is acquiring TotalEnergies EP Canada Ltd. and all its operations for C\$5.5 billion cash (\$4 billion), with contingent payments over five years of up to C\$600 million based on WCS benchmark pricing and certain production targets. CEO Rich Kruger said the transaction represents a major step in securing long-term bitumen supply to Suncor's Base Plant upgraders at a competitive supply cost. He added that the deal also introduces flexibility and optionality into the company's long-range capital plan.

Sale determined to be simpler and comparable in value to proposed spinoff.

The core assets of French supermajor TotalEnergies' Canadian subsidiary are its non-operated 31.23% stake in Suncor's Fort Hills oil sands mine and 50% WI in the Surmont steam-assisted gravity drainage project, which is operated by ConocoPhillips (50% WI). The U.S. E&P firm will have right of first refusal on the Surmont stake. Suncor said the deal also includes associated logistics commitments and C\$10.5 billion of tax pools. Total also has midstream, lubricants and marketing businesses in Canada, although they do not appear to be included in the deal. [Read more...](#)

Deal Secures Long-Term Bitumen Supply for Base Plant

- Further step in proactively addressing long-term bitumen supply strategy
- With two acquisitions at Fort Hills totaling 46% plus 50% of Surmont, 163 kbpd of bitumen production capacity acquired at ~\$38,000/bpd to partially replace 260 kbpd of Base Mine bitumen production
- Fort Hills and Surmont immediately add low-risk, high-quality bitumen production
- Fort Hills PFT volumes and bitumen production from Firebag and MacKay River can keep Base Plant upgraders full post end of mine life in mid-2030s



Source | Suncor 04/27/23 presentation via Enverus docFinder

Activity Index

Company	Headline	Location	PG.
ADNOC	ADNOC nixes contracts on gas mega-project, seeks new bids	Abu Dhabi	24
Antero Resources	Antero hones D&C efficiencies while leading on productivity	Marcellus	3
BP	Shell bows out of Browse gas JV in Australia with sale to BP	Australia	23
Callon Petroleum	Callon doubles down on Delaware as it bows out of Eagle Ford	Multi-Region	17
Challenger Energy	Challenger unveils Uruguay prospects analogous to Namibia	Uruguay	22
Chesapeake Energy	Ineos seals \$1.4B U.S. onshore entry deal with Chesapeake	Eagle Ford	17
Crescent Energy	Crescent taking the wheel from partner Mesquite for \$600MM	Eagle Ford	18
Diamondback Energy	Diamondback sees softening prices, FireBird upside	Permian Basin	11
ENAP	Chile's ENAP calling in \$600MM of 4.375% notes due 2024 early	Chile	22
ExxonMobil	Exxon tests Haynesville trio above 40 MMcf/d in East Texas	Haynesville	7
ExxonMobil	Exxon & partners sanction \$12.7B, 250 Mbo/d Uaru off Guyana	Guyana	21
ExxonMobil	Exxon applies for offshore blocks in Liberia after 2016 exit	Liberia	23
FireBird Energy II	FireBird II takes flight with \$500MM and new wingman Quantum	Permian Basin	19
Hess Corp.	Hess adds 10,000 boe/d to guidance after strong Q1	Bakken	12
Ineos	Ineos seals \$1.4B U.S. onshore entry deal with Chesapeake	Eagle Ford	17
Lycos Energy	Lycos claims 60% productivity boost with 'fishbone' design	Canada	8
Matador Resources	Matador to make a U-turn to drive capital efficiency	Delaware Basin	11
Mesquite Energy	Crescent taking the wheel from partner Mesquite for \$600MM	Eagle Ford	18
Mitsui & Co.	Mitsui acquires operated gas assets in Eagle Ford	Eagle Ford	18
Neptune Energy	Neptune turns on the taps at Fenja tieback to Njord off Norway	Norway	23
NGP Royalty Partners II	NGP invests \$100MM in 7th Wing Resources iteration	Permian Basin	19
OMV	OMV hits 6-35 MMboe in North Sea near Gudrun field	Norway	23
Percussion Petroleum Operating II	Callon doubles down on Delaware as it bows out of Eagle Ford	Multi-Region	17
Petrobras	Petrobras delays three FPSOs, no change in production targets	Brazil	21
PetroTal	With barging normalized, PetroTal returns to 20,000 bo/d output	Peru	22
Pioneer Natural Resources	Pioneer's Sheffield out, bolt-ons and acreage trades still in	Permian Basin	19
Range Resources	Gas not as oversupplied as market indicates, Range says	Appalachia	5
Razor Energy	Razor shaving C\$63MM of debt via recapitalization with AIMCo	Canada	20
Ridgemar Energy Operating	Callon doubles down on Delaware as it bows out of Eagle Ford	Multi-Region	17
Sage Natural Resources	Sage wraps up Barnett D&C, shifts to Eagle Ford oil	Multi-Region	9
Shell	Shell seeking to get Gato do Mato back on track with lower costs	Brazil	21
Shell	Shell bows out of Browse gas JV in Australia with sale to BP	Australia	23
SM Energy	SM's Midland drill speeds, STX adjustments drive Q1 savings	Midland Basin	10
Southwestern Energy	Southwestern's Marcellus liquids focus delivers Ohio upside	Marcellus	6
Southwestern Energy	Southwestern carries first-year Haynesville success forward	Haynesville	8
Suncor	Total exits oil sands in C\$5.5B blockbuster sale to Suncor	Canada	1
Suncor	Suncor's Terra Nova field could miss Q2 restart date	Canada	5
TotalEnergies	Total exits oil sands in C\$5.5B blockbuster sale to Suncor	Canada	1
TotalEnergies	Total moves closer to Cameia & Golfinho development off Angola	Angola	24
Tullow Oil	Tullow optimizes Gabon portfolio in Perenco asset swap	Gabon	24
U.S. Energy Development	U.S. Energy buys into Midland Basin project for \$225MM	Midland Basin	18
Whitecap Resources	Whitecap shifts capital & drilling schedules away from gas	Canada	6
Wing Resources VII	NGP invests \$100MM in 7th Wing Resources iteration	Permian Basin	19
Wintershall Dea	Wintershall Dea hits 200-300 MMboe in place off Mexico	Mexico	21

North American E&P

Eastern Regional Data (03/31/23-04/27/23)

Overview by State/Region	Permits	Δ	Spuds	Δ	Rigs	Δ	Operators	Δ
Illinois	-	-	-	-	3	-	-	-
Indiana	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-
Michigan	2	▼ (1)	3	▲ 1	2	-	2	-
New York	2	▲ 2	-	-	-	-	1	▲ 1
Ohio	1	▼ (19)	6	▼ (9)	12	▼ (1)	1	▼ (4)
Pennsylvania	70	▼ (55)	39	▼ (11)	28	▲ 5	13	▼ (1)
Tennessee	-	▼ (14)	-	-	-	-	-	▼ (2)
West Virginia	15	-	17	▲ 5	12	-	3	-

New Permits by Formation	Last 4 Wk	Prev 4 Wk	Yr Ago	2 Yr Ago	Rigs
Marcellus	39	129	84	80	31
Utica Shale & Point Pleasant	16	15	5	14	11
Bradford	13	2	4	-	-
Cooper	8	-	20	7	-
Clarendon & Glade	5	-	-	-	-
Others	9	28	38	45	15
Total	90	174	151	146	57

Top Counties by New Permits	Last 4 Wk	Prev 4 Wk	Yr Ago	2 Yr Ago	Rigs
Forest, PA	14	2	10	1	-
Susquehanna, PA	13	7	16	12	4
Greene, PA	12	18	9	6	3
Washington, PA	10	19	4	6	6
Warren, PA	7	-	15	10	-
Tyler, WV	6	6	1	6	1
Fayette, PA	6	2	-	7	-
Monongalia, WV	4	-	-	6	1
Westmoreland, PA	3	1	-	8	3
Wetzel, WV	3	5	-	1	2

Top Operators by New Permits	Last 4 Wk	Prev 4 Wk	Yr Ago	2 Yr Ago	Rigs
EQT Corp.	14	19	7	16	3
Coterra Energy	13	6	4	5	3
Range Resources	7	17	4	3	5
Antero Resources	7	12	7	7	3
John D Branch	7	-	-	-	-
Pennhills Resources	6	2	1	3	-
Greylock Energy	6	-	-	-	-
Southwestern Energy	5	5	23	8	5
Scorpio Energy	4	-	-	-	-
Curtis Oil	4	-	-	1	-

Top Completions by IP24	Operator	County	Reservoir	Lateral (ft)	boe/d	Oil (%)
Marbaker #26HC	Chesapeake	Susquehanna, PA	Marcellus	12,542	7,323	0%
Marbaker #25HC	Chesapeake	Susquehanna, PA	Marcellus	12,850	6,343	0%
Marbaker #124HC	Chesapeake	Susquehanna, PA	Marcellus	13,537	6,025	0%
Eisaman #7H	Apex Energy	Westmoreland, PA	Marcellus	12,950	2,682	0%
Eisaman #6H	Apex Energy	Westmoreland, PA	Marcellus	13,760	2,502	0%

Antero hones D&C efficiencies while leading on productivity

Antero Resources reached new heights of drilling and completion efficiency during Q1. The company set an internal record of 16 completion stages by a single crew in a 24-hour period and averaged 11 stages per day per crew during the quarter, up 22% from the 2022 average. It completed 1,323 stages in Q1, nearly one-third of the 4,209 stages planned for the year. Antero also said it drilled a world-record 12,340 ft in 24 hours. The Marcellus driller expects to carry forward these efficiency improvements, which have been accompanied by productivity gains.

Completed 1,323 stages in Q1, nearly one-third of 4,209 planned for 2023.

“Antero’s average cumulative equivalent production per well is 20% greater than the peer average” since 2020, CEO Paul Rady said on an April 27 earnings call. “This is an important distinction for Antero. With many companies having already drilled their best acreage, our long core inventory life continues to deliver stronger results each year.”

Antero also boasts the lowest decline rates in its peer group at 23% in the first year, 44% over three years and 56% over five years. The company noted that its base decline rate has continued to fall over its last three years of maintenance programs; 2023 marks Antero’s fourth consecutive maintenance program, and 2024 will mark the fifth. Rady is optimistic that maintenance capital requirements will fall in 2024.

“We are beginning to see service costs roll over for rigs and completion crews,” Rady said. “We’re also seeing a decline in costs for raw materials such as tubulars, fuel and sand. The combination of cost deflation, drilling and completion efficiency gains, and a lower decline rate is expected to result in lower overall maintenance capital requirements in 2024.”

Note | Operators in the top table and Rigs in all tables are based on active rigs as of the last date in the period covered. Source | Enverus Foundations, state data for Top Completions

Exploring the Future of Energy and Sustainability Through Civil Dialog and Critical Thinking

May 16-17, 2023 | Virtual

There is robust discussion in industry, government, academia and NGOs regarding the global energy future. One thing is certain, dialog is vital.

Moderated by Texas State Geologist Dr. Scott Tinker, host of the PBS talk show Energy Switch and founder of the Switch Energy Alliance, our panelists will discuss some of the most controversial topics in the global spotlight. The panel will engage in lively discourse around several critical energy and climate questions.



Dr Scott Tinker
Chairman, Switch Energy Alliance

- Do we need to engage in civil dialog and debate?
- What are the merits of mitigating future climate change versus adapting?
- Should we advance energy technologies via the private sector or government mandates and incentives?
- What is the role of oil and gas companies in decarbonization?
- Is there a need for human diversity to solve environmental and energy challenges?
- Is there such a thing as clean energy? Should nuclear play a role?
- What will be required to significantly accelerate solar, wind and batteries?
- Can these issues be addressed if all global citizens are not lifted up economically?

Meet Our Panelists



Chris Wright
CEO and Chairman,
Liberty Energy



Julio Friedman
Chief Scientist, Carbon Direct
(formerly in the Obama DOE)



Register Today

North American E&P

Gas not as oversupplied as market indicates, Range says

Range Resources COO Dennis Degner has started to see a slight reduction in prices for rig and pumping crews as continued low natural gas prices cause some operators to reduce activity. Raw materials such as tubular goods and sand are also “showing signs of increased availability,” Degner said on the company’s April 25 earnings call. He added, “It is possible this could translate into slight one-off savings later this year with broader savings more likely to occur in 2024.”

This gradual slowing in activity is a piece of the puzzle that Range believes will drive normalization in natural gas storage volumes during injection season and into winter. Most large operators in Appalachia are continuing maintenance programs—in Range’s case to keep gathering infrastructure utilization high and drive capital and operational efficiency—and well degradation is starting to negatively impact operators’ production profiles. With lower activity and lower production, the impacts are “less of an oversupplied market potentially.”

Seeing signs of a D&C pullback, increased availability of raw materials.

Continued strong demand would also support Degner’s view. He suggested a potential storage range of 3.9-4.0 Tcf at the end of the injection season, adding, “coupled with demand that’s been coming online over the past several years, both on the industrial side, LNG now with Freeport being back up to full capacity, not to mention the additional infrastructure that’s going to be coming online in 2024, you start to get to a place of 42 days of supply at the end of injection season”—which is below the five-year average. Degner added that “there’s reason to believe” the first train of Cheniere Energy’s Golden Pass LNG could come online in mid-2024 and “start to play a significant role as we then roll into injection season for 2024.”

Range ran an average of two top-hole rigs and three horizontal rigs in Q1 and plans to continue that level of activity through the end of Q2. Drilling activity will taper in H2. In contrast, the company is running one completion crew and will add a second in H2.

The company noted multiple efficiency achievements in Q1. It broke its internal record for daily lateral footage drilled on three separate days. Thirteen of the Q1 wells achieved drilling paces exceeding a mile a day in their lateral sections, up from just four wells in all of 2022. This increase helped lift Range’s average daily lateral footage by 42%. In addition, the company drilled three laterals exceeding 18,000 ft in Q1, all ranking among its 10 longest.

On the completion side, Range averaged eight frac stages per day during Q1 and was up to nine stages per day going into Q2.

Suncor’s Terra Nova field could miss Q2 restart date

The Suncor Energy-operated Terra Nova oil field offshore Newfoundland and Labrador may miss the previous projection of a return to production in Q2. Project partner Cenovus Energy’s offshore EVP Norrie Ramsay said during the company’s Q1 earnings call April 26 that Suncor informed it that taking the FPSO back offshore had been delayed and some maintenance work was continuing but otherwise referred questions about when Terra Nova would resume production to Suncor. The operator reports its Q1 results May 8 and holds its annual general meeting May 9, when it may provide further updates on Terra Nova.

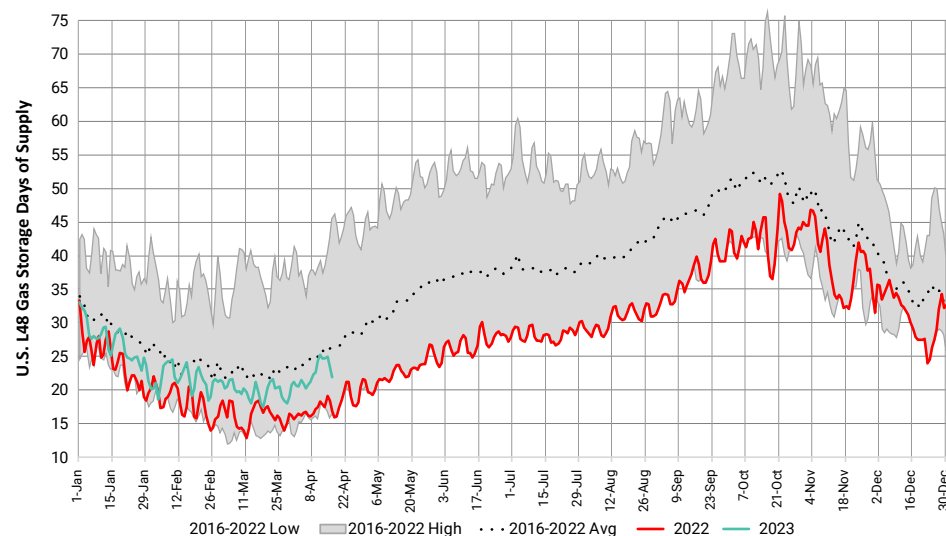
Cenovus said operator informed it that returning FPSO offshore was delayed.

In anticipation of the delay, Cenovus reduced its 2023 upstream production guidance from 800,000-840,000 boe/d to 790,000-810,000 boe/d, a 2.4% reduction at midpoint. It said the change included a 10,000 boe/d reduction from its Atlantic production range, reflecting the removal of Terra Nova volumes.

The Terra Nova FPSO returned to Canada in February after departing port in Spain in January, where it had been upgraded. Cenovus said in its Q1 earnings release that the vessel remains dockside in Newfoundland and Labrador, where it is undergoing further maintenance. At the time the FPSO returned to Canada, Suncor still projected that the field would come back online in Q2. However, the CBC reported earlier in April that Suncor was no longer providing a schedule for the restart. A spokesperson told the outlet the company was “evaluating any impacts to the schedule.”

Terra Nova field was discovered in 1984 and began production in 2002. The field has been shut in since 2019 for a project to extend its producing life by 10 years and unlock an additional 70 MMbo of recoverable resources. The project was almost canceled entirely following the oil price crash in 2020 but was saved at the 11th hour by an agreement that restructured ownership.

Lower 48 Storage Days of Supply Remain in Line with Average



Source | Range Resources 04/24/23 presentation



Thank you! We hope you've enjoyed your sample of our Upstream Pulse report.

Enverus is the trusted source for global oil & gas and renewables activity, including projects and operations, M&A activity, capital markets and new technologies.

Public Health Report

Healthcare Services and Quality Improvement

Service Area	2018	2019	2020	2021	2022
Primary Care	120	130	140	150	160
Specialist Services	80	85	90	95	100
Emergency Services	50	55	60	65	70
Maternity Services	30	32	34	36	38
Paediatric Services	40	42	44	46	48
Older People's Services	20	22	24	26	28
Mental Health Services	10	11	12	13	14
Learning Disability Services	5	5	5	5	5
Community Health Services	15	16	17	18	19
Public Health Services	8	8	8	8	8

Quality Indicator	2018	2019	2020	2021	2022
Patient Satisfaction	85	88	90	92	94
Staff Satisfaction	75	78	80	82	84
Service Efficiency	65	68	70	72	74
Healthcare Costs	55	58	60	62	64
Healthcare Access	45	48	50	52	54
Healthcare Quality	35	38	40	42	44
Healthcare Safety	25	28	30	32	34
Healthcare Equity	15	16	17	18	19
Healthcare Sustainability	10	11	12	13	14
Healthcare Innovation	5	5	5	5	5

Healthcare Services and Quality Improvement

The following table provides a detailed overview of the healthcare services and quality improvement initiatives implemented over the period from 2018 to 2022. The data is presented in a structured format, allowing for easy comparison and analysis of performance across various service areas and quality indicators.

The table is organized into two main sections: Healthcare Services and Quality Improvement. Each section contains a table with columns representing the years from 2018 to 2022. The rows represent different service areas and quality indicators, with values indicating performance levels or metrics.

In the Healthcare Services section, the data shows a steady increase in service provision across all categories, with Primary Care services showing the most significant growth. Specialist Services, Emergency Services, Maternity Services, Paediatric Services, Older People's Services, Mental Health Services, Learning Disability Services, and Community Health Services all show consistent upward trends.

In the Quality Improvement section, the data highlights improvements in patient and staff satisfaction, service efficiency, healthcare costs, healthcare access, healthcare quality, healthcare safety, healthcare equity, and healthcare sustainability. Innovation remains a constant focus, with a score of 5 maintained throughout the period.

Introduction

Understanding the Current State of Public Services

The current state of public services is characterized by a complex interplay of factors, including budget constraints, technological advancements, and changing public expectations. This section provides a comprehensive overview of the challenges and opportunities facing public service providers.

One of the primary challenges is the increasing demand for services, coupled with a stagnant or declining budget. This necessitates a re-evaluation of resource allocation and operational efficiency. Additionally, the rapid pace of technological change requires public service providers to invest in digital infrastructure and training to remain relevant and effective.

Key Challenges:

- Budget constraints
- Technological change
- Changing public expectations

Addressing these challenges requires a strategic approach that focuses on process optimization and innovation. By streamlining operations and leveraging technology, public service providers can enhance the quality and efficiency of their services, ultimately leading to improved public satisfaction and trust.

The following sections will explore various strategies and best practices for optimizing public services, from process re-engineering to digital transformation. Each section will provide actionable insights and case studies to guide implementation.

Next Steps:

- Conduct a thorough audit of current processes.
- Identify areas for improvement and prioritize them.
- Develop a clear implementation plan with defined milestones.

Process Optimization

Process optimization is a critical component of public service improvement. It involves analyzing existing workflows to identify inefficiencies and implementing changes to streamline operations. This section discusses various techniques and tools used in process optimization.

One effective technique is Value Stream Mapping (VSM), which helps visualize the flow of materials and information through the organization. By identifying waste and non-value-added activities, public service providers can significantly reduce cycle times and improve service delivery.

Another key area for optimization is the standardization of processes. Establishing clear, consistent procedures ensures that all service providers are following the same best practices, which leads to higher quality and more predictable outcomes. Regular training and communication are essential to ensure that these standards are understood and followed.

Continuous improvement is also a vital part of process optimization. Public service providers should encourage employees to identify and report inefficiencies, and create a culture where experimentation and learning from mistakes are encouraged. Regular reviews and updates to processes ensure that they remain effective in the face of changing circumstances.

Implementing process optimization requires a commitment to change and a focus on the long-term benefits for the public. By embracing these strategies, public service providers can achieve significant improvements in efficiency and service quality, leading to a more responsive and effective public sector.

The following sections will delve deeper into specific optimization techniques, such as Lean Six Sigma and Total Quality Management (TQM), and provide detailed guidance on how to apply them in a public service context.

By focusing on process optimization, public service providers can ensure that their operations are as efficient and effective as possible, ultimately leading to better service for the public and a more sustainable public sector.

Key Takeaways:

- Process optimization is essential for improving public services.
- Use techniques like VSM and standardization to identify and eliminate inefficiencies.
- Encourage a culture of continuous improvement and employee involvement.

Table 1: Agreement Tables

Table 1: Agreement Tables

Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement

Table 2: Agreement Tables

Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement
Agreement	Agreement	Agreement	Agreement	Agreement	Agreement

Table 3: Agreement Tables

Table 3: Agreement Tables

Table 3: Agreement Tables

Table 3: Agreement Tables

Table 3: Agreement Tables

Table 3: Agreement Tables

Table 4: Agreement Tables

Table 4: Agreement Tables

Table 4: Agreement Tables

Table 4: Agreement Tables

Table 4: Agreement Tables

Table 4: Agreement Tables

Introduction

1.1. Purpose and Scope of the Agreement

Item	Value	Item	Value	Item	Value	Item	Value
...

1.2. Definitions

Term	Definition
...	...
...	...

1.3. Terms and Conditions

2.1. General Provisions

This section contains the general provisions of the agreement, including the governing law, dispute resolution, and other standard clauses. The text is currently blurred.

Introduction

Background and Purpose of the Agreement

The undersigned parties, hereinafter referred to as the "Parties," have entered into this Agreement of Parties (AOP) to define the terms and conditions of their relationship. The Parties are committed to the principles of transparency, mutual respect, and collaboration in their interactions.

This AOP is intended to provide a clear and concise framework for the Parties' relationship, covering the scope of the agreement, the roles and responsibilities of each Party, and the mechanisms for dispute resolution.

The Parties agree to abide by the terms and conditions set forth in this AOP, and to maintain the confidentiality of the information disclosed herein.

The Parties further agree to review and update this AOP as needed to reflect changes in the relationship or the law.

This AOP is entered into as of the date first written above, and is binding on the Parties.

Definitions and Key Terms

The following definitions apply to the terms used in this AOP:

- "Parties" shall mean the individuals or entities who have signed this AOP.
- "Confidential Information" shall mean any information that is disclosed by one Party to another Party in confidence.
- "Dispute" shall mean any disagreement or conflict between the Parties.

The Parties agree to use their best efforts to resolve any disputes in a timely and fair manner.

This AOP is intended to be the entire agreement between the Parties.

The Parties agree to sign and execute this AOP in duplicate, with each Party retaining one copy.

This AOP is entered into as of the date first written above, and is binding on the Parties.

Signature

Name
Title

Signature

Name
Title

Signature

Name
Title

Signature

Name
Title

Signature

Name
Title

Signature

Name
Title

Agreement Tables

Agreement Tables

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	1	3	4	5	6	7	8	9	10
3	3	2	1	4	5	6	7	8	9	10
4	4	3	2	1	5	6	7	8	9	10
5	5	4	3	2	1	6	7	8	9	10
6	6	5	4	3	2	1	7	8	9	10
7	7	6	5	4	3	2	1	8	9	10
8	8	7	6	5	4	3	2	1	9	10
9	9	8	7	6	5	4	3	2	1	10
10	10	9	8	7	6	5	4	3	2	1

Agreement Tables

Agreement Tables

Agreement Tables

Agreement Tables

Department of Public Health - Health Services

HEALTH SERVICES - PUBLIC HEALTH SERVICES

Item	Quantity	Unit	Rate	Total
Public Health Services	100	Hour	15.00	1500.00
Public Health Services	200	Hour	15.00	3000.00
Public Health Services	300	Hour	15.00	4500.00
Public Health Services	400	Hour	15.00	6000.00
Public Health Services	500	Hour	15.00	7500.00
Public Health Services	600	Hour	15.00	9000.00
Public Health Services	700	Hour	15.00	10500.00
Public Health Services	800	Hour	15.00	12000.00
Public Health Services	900	Hour	15.00	13500.00
Public Health Services	1000	Hour	15.00	15000.00

Department of Public Health - Health Services Administration

HEALTH SERVICES ADMINISTRATION - B.S. DEGREE REQUIREMENTS

Requirement	Course	Prerequisites	Notes
1. General Education			
2. Major Requirements			
3. Electives			
4. Internship			
5. Thesis			

Additional text content, likely a list of courses or detailed requirements, which is currently illegible due to blurring.

1. Introduction



2. Objectives

The objectives of this agreement are to ensure that all parties involved in the project are fully informed of their rights and responsibilities. This document serves as a legal framework for the collaboration, outlining the scope of work, the roles of each party, and the mechanisms for dispute resolution. It is intended to provide clarity and prevent misunderstandings throughout the duration of the project.

3. Definitions

Term	Definition
Party A	Refers to the individual or entity identified as Party A in the agreement.
Party B	Refers to the individual or entity identified as Party B in the agreement.
Project	Refers to the specific project or initiative mentioned in the agreement.
Agreement	Refers to this document, which sets forth the terms and conditions of the collaboration.

The definitions provided in this section are essential for the proper interpretation of the agreement. They establish the meaning of key terms used throughout the document, ensuring that all parties have a consistent understanding of the agreement's provisions.

This agreement is a binding legal document that governs the relationship between the parties. It is intended to be read in its entirety, and any ambiguity or conflict in the provisions shall be resolved in favor of the party that drafted the agreement.

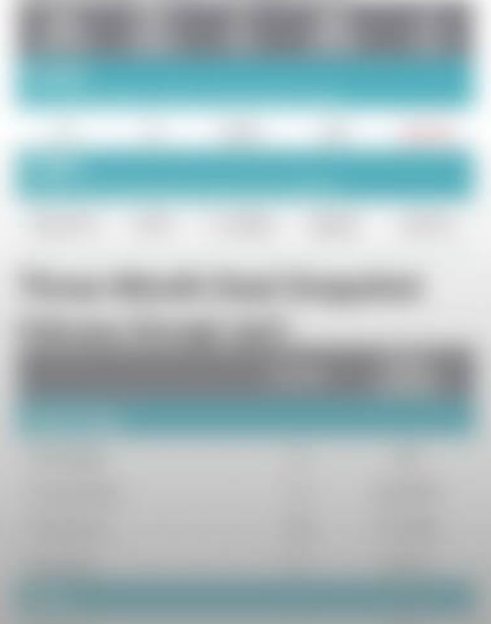
Agreement Public

Agreement Public

Agreement Public



Agreement Public



Agreement Public



Agreement Public



Introduction

THE CHALLENGE OF OPTIMIZING PUBLIC SERVICES

In the past few years, the public sector has faced a significant challenge: how to deliver high-quality services to citizens while managing limited resources. This challenge is particularly acute in the areas of healthcare, education, and social services, where the needs of the population are often complex and diverse. The goal of this report is to explore the various strategies and tools that can be used to optimize public services, from data-driven decision-making to process re-engineering.

The first part of the report will focus on the importance of data in understanding public service needs and performance. This will be followed by a discussion of the various tools and techniques that can be used to analyze and improve service delivery. Finally, the report will conclude with a series of recommendations for how to implement these strategies in a way that is both effective and sustainable.



THE ROLE OF DATA IN PUBLIC SERVICE OPTIMIZATION

Data is the foundation of any optimization effort. In the public sector, data can be used to identify areas of inefficiency, understand the needs of different groups of citizens, and measure the impact of various interventions. By collecting and analyzing data, public service providers can make more informed decisions about how to allocate resources and improve service delivery.

There are many different types of data that can be used in public service optimization, including demographic data, service usage data, and performance data. Each type of data provides a different perspective on the public service system, and together they can provide a comprehensive view of the challenges and opportunities facing the sector.

One of the key challenges in using data for optimization is ensuring that the data is accurate and reliable. This requires a strong commitment to data quality and a robust system for data collection and management. Additionally, it is important to ensure that the data is used in a way that respects the privacy and rights of citizens.

Despite these challenges, the benefits of using data for optimization are clear. By using data to guide decision-making, public service providers can improve the efficiency and effectiveness of their services, leading to better outcomes for citizens and a more sustainable public sector.

In conclusion, data is a powerful tool for optimizing public services. By using data to understand the needs of citizens and the performance of the public sector, service providers can make more informed decisions and improve the quality of their services. This is a critical step towards building a more efficient and effective public sector.

The next part of the report will explore the various tools and techniques that can be used to analyze and improve service delivery. This will include a discussion of process re-engineering, lean management, and other optimization strategies.

Finally, the report will conclude with a series of recommendations for how to implement these strategies in a way that is both effective and sustainable. This will include a focus on building a strong data culture, investing in the right tools and technologies, and ensuring that the public sector is well-equipped to handle the challenges of the future.

Introduction

1.1 Purpose and Scope of the Agreement

The purpose of this Agreement is to establish the terms and conditions for the use of the [Product/Service] provided by [Company Name]. This Agreement applies to all users who access or use the [Product/Service], regardless of whether they are registered users or not.

By using the [Product/Service], you agree to be bound by the terms and conditions set forth in this Agreement. If you do not agree with these terms, you should not use the [Product/Service].

This Agreement is a legal document that governs the relationship between you and [Company Name]. It is intended to be a fair and equitable agreement that protects the interests of both parties.

1.2 Definitions

The following definitions apply to this Agreement:

- "[Product/Service]" refers to the [Product/Service] provided by [Company Name].
- "User" refers to any individual who accesses or uses the [Product/Service].
- "Company" refers to [Company Name].

2.1 License Grant

[Company Name] grants you a limited, non-exclusive, non-transferable license to use the [Product/Service] for personal, non-commercial purposes only. This license is subject to the terms and conditions of this Agreement.

You may not copy, reproduce, distribute, or otherwise make available the [Product/Service] or any part thereof to any third party without the prior written consent of [Company Name].

All rights not expressly granted to you under this license are reserved by [Company Name].

2.2 Restrictions

The following restrictions apply to your use of the [Product/Service]:

- You may not use the [Product/Service] for any illegal or prohibited activities.
- You may not use the [Product/Service] to harass, abuse, or defame any individual or entity.
- You may not use the [Product/Service] to collect or disseminate personally identifiable information about any individual without their consent.

1. Introduction

This agreement is made between the undersigned parties, who have read and understood the contents of this agreement and have agreed to be bound by its terms and conditions. The parties are:

- 1.1 Party A: [Name]
- 1.2 Party B: [Name]

The purpose of this agreement is to define the terms and conditions of the relationship between the parties.

2. Definitions

2.1 "Party A" shall mean [Name]

2.2 "Party B" shall mean [Name]

2.3 "Agreement" shall mean this document.

3. Terms and Conditions

3.1 The parties agree to the following terms and conditions:

- 3.1.1 [Condition 1]
- 3.1.2 [Condition 2]
- 3.1.3 [Condition 3]

4. Signatures

4.1 This agreement is signed by the parties on the date and at the place indicated below:

4.2 Party A: [Signature]

4.3 Party B: [Signature]

Introduction

The first section of the document discusses the importance of public optimization in the current economic climate. It highlights the need for governments to implement effective policies that can stimulate growth and create jobs. The text emphasizes the role of public infrastructure and services in supporting the private sector and improving the overall quality of life for citizens.

Key findings:
- Public infrastructure investment is crucial for long-term economic growth.
- Streamlining government services can reduce costs and improve efficiency.

The second section of the document provides a detailed analysis of the current public infrastructure landscape. It identifies key areas for investment, such as transportation, energy, and water supply. The text also discusses the challenges of financing these projects and the need for innovative financing mechanisms. The analysis concludes that a comprehensive strategy is required to address the infrastructure needs of the future.

Conclusion

The final section of the document summarizes the key findings and provides recommendations for policymakers. It stresses the importance of a multi-stakeholder approach to public optimization, involving government, the private sector, and civil society. The text calls for a commitment to long-term planning and investment in public infrastructure to ensure a sustainable and prosperous future for all.

Next steps:
- Develop a national infrastructure strategy.
- Establish a dedicated infrastructure fund.

Introduction

Background and Purpose of the Agreement

The purpose of this agreement is to establish the terms and conditions for the use of the software. This document outlines the rights and responsibilities of both the user and the provider. It is intended to ensure a clear understanding of the service being provided and to protect the interests of both parties.

Key Terms and Definitions

Software: The computer program and associated data that the user is licensed to use.

User: The individual or entity who has agreed to use the software.

Provider: The company or organization that owns the software and provides the license.

License Grant and Restrictions

The provider grants the user a non-exclusive, non-transferable license to use the software for personal or internal business purposes only. The license is limited to the number of users specified in the license agreement. The user is prohibited from copying, distributing, or modifying the software in any way.

Ownership and Intellectual Property

All rights in the software, including any patents, trademarks, or copyrights, are reserved by the provider. The user acknowledges that the software is the property of the provider and that the user is using it under license.

Introduction

The optimization problem is defined by the objective function and the constraints. The goal is to find the minimum value of the objective function subject to the constraints. The problem is solved using the gradient method. The gradient method is a first-order iterative algorithm for finding the local minimum of a function. It is based on the fact that the gradient of a function at a point is perpendicular to the level set of the function at that point. The algorithm starts at an initial point and iteratively moves in the direction of the negative gradient until it reaches a local minimum.

The optimization problem is solved using the gradient method. The gradient method is a first-order iterative algorithm for finding the local minimum of a function. It is based on the fact that the gradient of a function at a point is perpendicular to the level set of the function at that point. The algorithm starts at an initial point and iteratively moves in the direction of the negative gradient until it reaches a local minimum.

Mathematical Formulation

The optimization problem is formulated as follows: minimize the objective function $f(x)$ subject to the constraints $g(x) \leq 0$. The objective function is a scalar function of the decision variables x . The constraints are a set of inequality functions of the decision variables x . The optimization problem is solved using the gradient method.

Algorithm

The algorithm for solving the optimization problem using the gradient method is as follows: 1. Initialize the decision variables x to an initial value. 2. Compute the gradient of the objective function $f(x)$ at the current point. 3. Move in the direction of the negative gradient to update the decision variables x . 4. Repeat steps 2 and 3 until convergence is reached.

Introduction

Background and Purpose of the Agreement

The purpose of this agreement is to establish the terms and conditions for the use of the software. This document outlines the rights and responsibilities of both parties, ensuring a clear understanding of the software's capabilities and limitations. It is intended to provide a legal framework for the relationship between the user and the software provider.

Key Terms and Definitions

This section defines the key terms used throughout the agreement, such as "Software," "User," and "Provider." It also includes a list of the software's features and a detailed description of the user's obligations. The definitions are crucial for interpreting the agreement's provisions and ensuring that both parties have a common understanding of the terms.

License and Usage Restrictions

The software is provided under a license that grants the user the right to use the software for personal or business purposes. The license includes specific restrictions on the number of users, the geographical location of use, and the ability to modify or redistribute the software. These restrictions are designed to protect the provider's intellectual property and ensure the software is used in a manner consistent with its intended purpose.

Warranty and Liability

The provider warrants that the software will perform substantially in accordance with the published specifications. However, the provider disclaims any liability for damages, including direct, indirect, or consequential damages, arising from the use of the software. This limitation of liability is a standard provision in software licenses to protect the provider from potential legal claims.

Termination and Renewal

The agreement is subject to termination if the user breaches any of the terms and conditions. Upon termination, the user must cease using the software and delete any copies. The agreement may be renewed automatically unless the user provides notice of non-renewal. This section outlines the process for ending the agreement and the conditions for its continuation.

Introduction

The first section of the document discusses the importance of public optimization in the current economic climate. It highlights the need for governments to implement effective policies that can stimulate growth and create jobs. The text emphasizes the role of public infrastructure and services in supporting the private sector and improving the overall quality of life for citizens.

The second section focuses on the challenges faced by public organizations in achieving their goals. It identifies key areas such as budget constraints, inefficient processes, and a lack of innovation. The text suggests that addressing these challenges requires a combination of strategic planning, operational improvements, and a commitment to transparency and accountability.

Key Findings and Recommendations

The findings of the study indicate that public optimization is essential for long-term sustainability. Key recommendations include: 1) Streamlining government operations to reduce costs and improve efficiency. 2) Investing in digital infrastructure to enhance service delivery and data management. 3) Encouraging public-private partnerships to leverage private sector expertise and resources. 4) Implementing robust performance metrics to monitor progress and ensure accountability.

Conclusion

In conclusion, the report underscores the critical role of public optimization in driving economic growth and social progress. By adopting a proactive and data-driven approach, governments can overcome existing challenges and build a more resilient and prosperous future. The recommendations provided offer a clear path forward for public organizations seeking to maximize their impact and efficiency.

The authors express their gratitude to the stakeholders who provided valuable insights and support throughout the research process. They also acknowledge the limitations of the study and suggest areas for further research.