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COVID-19: Way Forward for Oil Markets

APRIL 2020

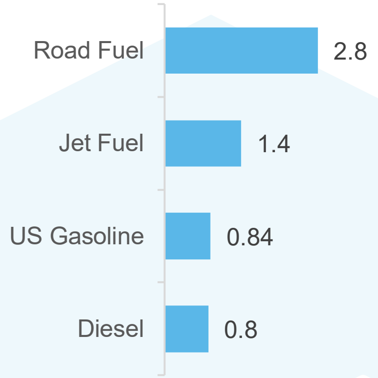
Ripple effects of demand shock from COVID-19, felt across the value chain

Given the current state of outbreak it's unlikely that the demand loss from COVID-19 would diminish before Q3 2020 and despite the optimistic recovery, 2020 oil demand will still face substantial decline.

Oil Products

Steep erosion in global demand for refined oil products

mmb/d



Refining

> 5.0 mmb/d decline in oil processing in 1Q 2020, globally

- **Low** refinery runs and capacity shut-downs
- **3.5 mmb/d** decline in US refinery runs (Q1 2020)
- **~30% decline** in China's refinery utilization in 1Q2020

Midstream

Spike in Oil tanker rates owing to huge demand for storage and transport

- **350%** increase in freight rates for VLCC in March'20
- **~100%** increase in lease costs of storage
- **~75%** of global oil storage capacity already full

E&P and services

Reduction in E&P activity as corporates cut investments

- **> $200 Bn** – Est. decline in CAPEX (2020 vs 2019)
- **~ $100 Bn** – Est. decline in OPEX (2020 vs 2019)
- **> $90 Bn** – Est. decline in OFS purchases (2020 vs 2019)

 Sources: Rystad Energy; IHS Refining and Marketing Insight; Bloomberg; Braemar ACM

What are the possibilities ahead ?

"LONG DRAWN" scenario is most likely. Amidst agreement on production cuts and strong measures to contain COVID, 2021-22 is likely to mark the recovery of oil markets.

SCENARIOS	Implications for OPEC+	Implications for Oil Majors	Implications for US Independents	Implications for OFS
LONG DRAWN **COVID and Crude oversupply contained by Q4'20** **Q1/Q2 2021: Brent reaches $40/bbl**	• Small OPEC nations face fiscal deficit • New projects delay into 2021	• Portfolio optimization and divestments • Downstream and chemicals come to core	• High solvency risk • Production decline due to downsized operations	• Drilling activity stays low • Debt pressure and high solvency risk
PROLONGED SURPLUS **Demand loss contained by Q4'20 but Oversupply extends beyond** **Q4 2020: Brent reaches $40/bbl**	• Oversupply delays recovery • GCC faces depletion in forex reserves	• Aggressive capital discipline • Ramp-up in downstream and chemicals capacity	• Bankruptcies spike • Opportunistic E&Ps focus on DUC wells	• Bankruptcies spike • Aggressive capital discipline and downsizing

As per Evalueserve's analysis, Brent prices are likely to recover to $40/bbl by Q1/Q2 2021 provided that the COVID-19, is successfully contained by end of Q2 2020 resulting in oil demand returning to pre-crisis levels in 2H 2020. The rise in Brent prices would lag the demand recovery due to excess production and accelerate gradually as stockpiles start to drop.

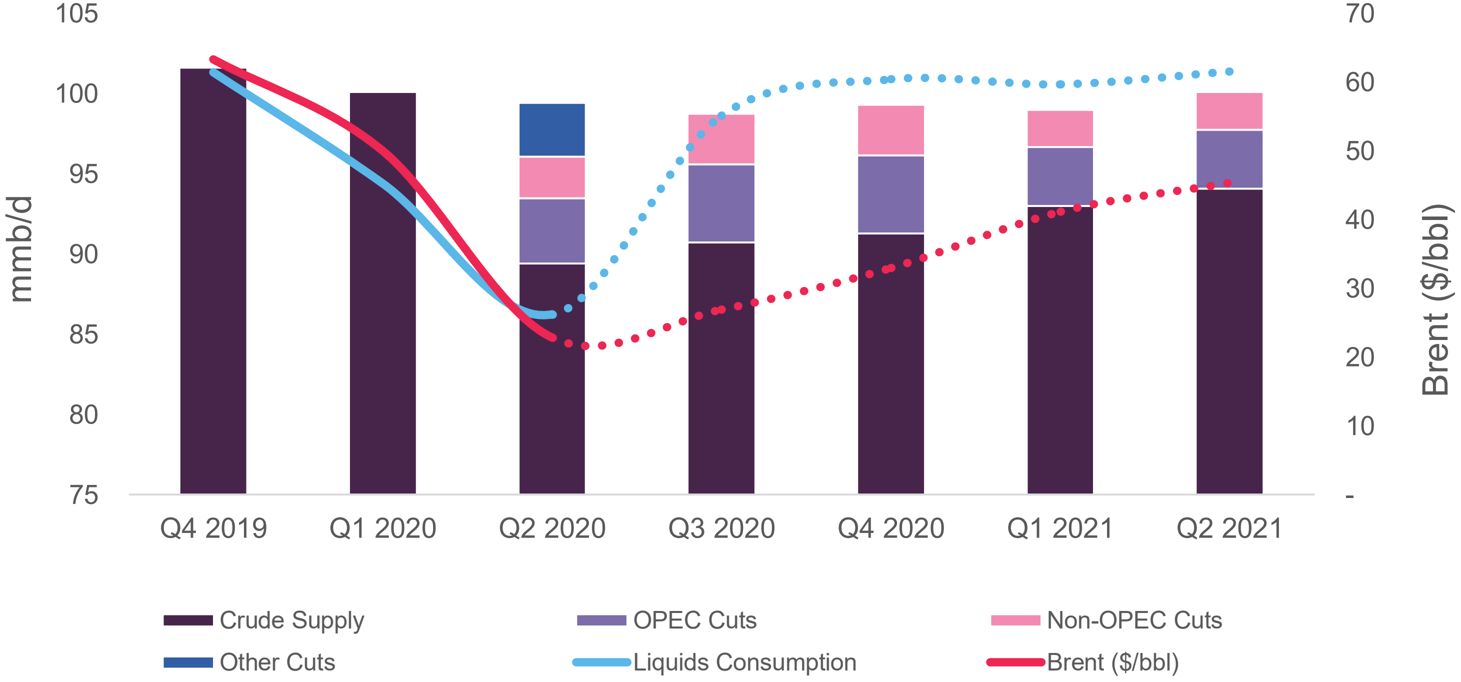
 Sources: Evalueserve Analysis

OPEC+ cuts: Will the supply side deal be enough?

Despite the agreed production cuts of ~15.0 mmb/d, rebound in oil prices would predominantly depend on the acceleration of demand growth in 2H2020, assuming that COVID is contained and OPEC+ and others are compliant with cuts.

Despite the coordinated supply cuts, Q2 2020 is likely to witness substantial oversupplies, more refining run cuts and storage standstills. While the production cuts are unlikely to prevent inventory builds in coming months, it would lead to stock reductions from the second half of 2020 onwards.

Oil Balance vs Announced Production Cuts



Note: The projections based on the assumption that COVID-19 is contained by Q2 2020 and demand recovers by Q3 2020. This in turn would drive a gradual recovery in oil prices by Q4 2020-Q1 2021

Brent barely moved: Despite the announcement of record production cuts, Brent rose merely by 1.6% on the day

Demand loss steeper than cuts: ~15 mmb/d cuts by OPEC+ and Others, might not be enough to offset the expected 19 mmb/d demand loss in April-May 2020

Significance of alliance: Could lead to greater stability in oil markets and geopolitical dynamics, in the long-term

US production cuts: on track for a market-driven production decline of 2-3 mmb/d in 2020

Source: OPEC; EIA Short-term Energy Outlook; Morgan Stanley COVID Analysis March 2020; Bloomberg

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What happens to upstream investment cycle?

Just like the previous crash of 2014, the CAPEX will likely be subdued for next 2-3 years, until 2022, owing to the risk-averse approach by companies. E&P spending for US onshore will be the hardest hit for next 3 years.

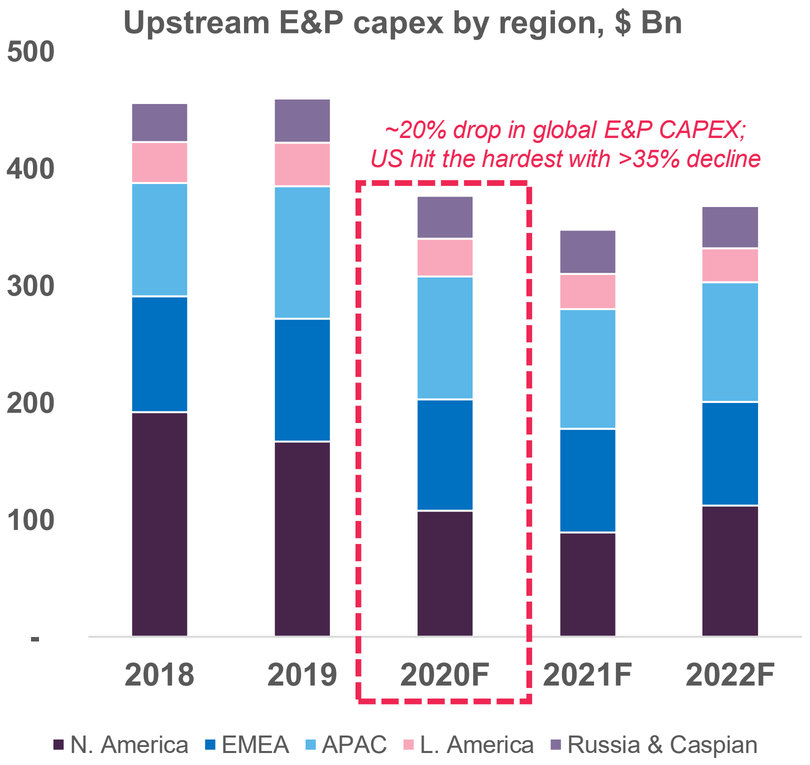
VALUE EROSION UPSTREAM

>$800 Bn
Lost by top 25 oil companies in 1Q 2020

~14 mmb/d
Est. oil demand loss in Q2 2020

~6,000
Delayed horizontal wells earlier planned for 2020

IMPACT ON E&P SPEND



WHAT's NEXT?

- **Fiscal deficit:** Small OPEC nations face fiscal deficit in the near-term, assuming demand recovery in 2021
- **Big Oil:** IOCs to survive the crisis owing to their portfolio flexibility and financial muscle
- **US Independents:** Pure-play shale producers face plateaued production and high solvency risks
- **Growth CAPEX:** Subdued guidance at-least for next 2-3 years

 Sources: *IHS E&P Spend Analysis March 2020; Company Filings; Evalueserve Analysis*

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Oil Field Services…once again in the 'survival mode'

Although OFS companies have reduced CAPEX and are optimizing their operations, they continue to face significant bankruptcy risk in case the E&P activity continues to be slow beyond 2020

PRESSURES FACED

USD 32 Bn
US OFS debt overdue during 2020-24

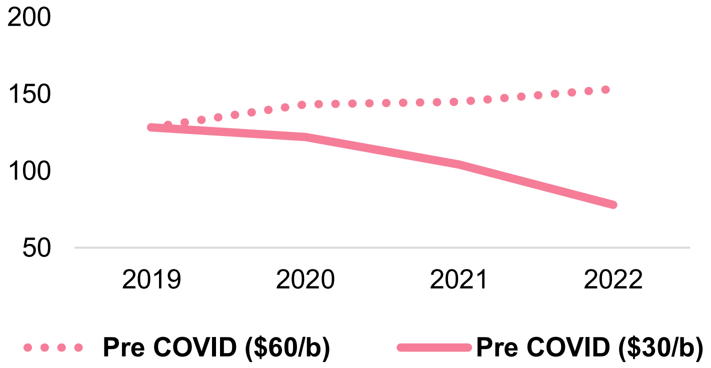
>200
OFS companies of Europe close to declaring bankruptcy

>1.0 Million
Job cuts expected in OFS industry in due to low project volumes

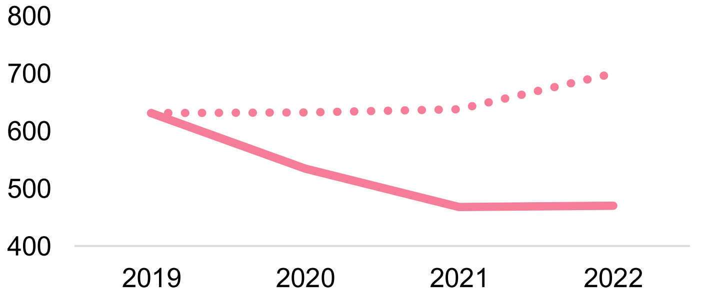
>30%
decline in 2020 E&P spending

COVID IMPACT

FLOATER RIG DEMAND



OFS PURCHASES, $ Bn



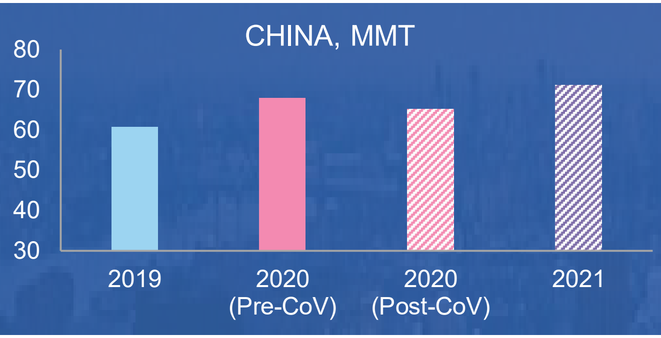
KEY CONSIDERATIONS

- **Project Delays:** Project sanctioning schedules are expected to face delays into 2021
- **Low drilling activity:** Largest reductions expected in the US as operators cancel drilling plans to secure cash.
- **Cost Reduction:** OFS companies have accelerated structural cost reductions
- **CAPEX:** Distressed companies idling equipment and lowering CAPEX commitments

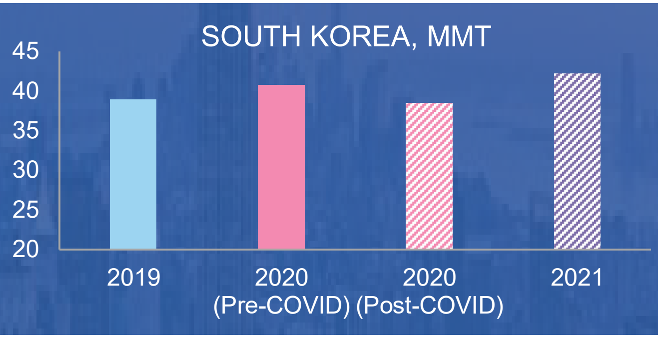
 Sources: Rystad Energy; Oil Price, S&P Global; NaturalGasIntel; Evalueserve Analysis

LNG Demand…would there be a respite after COVID-19?

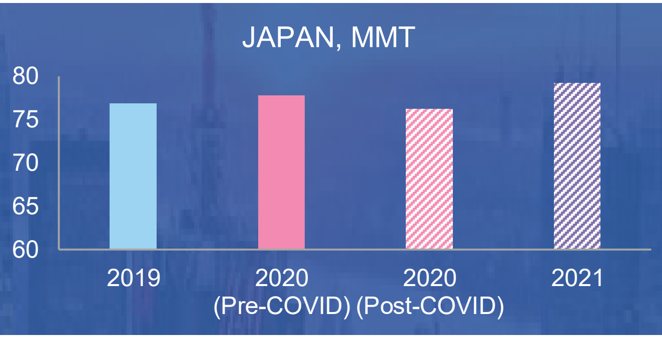
Amidst demand erosion and cargo deferrals, up to 8% of global LNG demand could be at risk (more than 25 MTPA, in the near term, while the low-price environment could last at least till Q2 2020



Impact on Gas Demand (2020) ~3 MMT



Impact on LNG Demand (2020) ~2.2 MMT



Impact on LNG Demand (2020) ~1.1 MMT

PAIN-POINTS FOR LNG PRODUCERS

SHRINKING SPREAD
Spot and oil-indexed prices have fallen ~$3.0 per mmbtu in Europe and Asia

DEMAND IMBALANCE
An already oversupplied LNG market is sapped further by demand loss from slow economic activity

GIANT PROJECTS
Fate of Giant LNG projects is undetermined due to high financial risk

CARGO DEFERRALS
Key Asian buyers deferring cargos due to high inventory levels and demand loss

ELUDING LONG-TERM CONTRACTS
Buyer preference to rely on spot market rather than signing up to long-term offtake

Beyond the financial impact, development of future liquefaction projects stay at risk, because market volatility would deter investors and make it tricky to approve new projects, especially the large scale ones This will particularly affect US independent developers, which need upfront customer commitments to secure project financing

 Sources: Woodmac Spotfire; Platts Navigator; Evalueserve Analysis

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Oil Refiners…it could get worse…

Amidst expectations that Q2 2020 would witness the worst demand loss than March 2020, its likely that oil refiners have to make deeper cuts in their refinery runs. However, the run cuts are unlikely to keep pace with plunging fuel margins.

The global refiners will continue to optimize their crude runs to balance production economics, at least till the end of Q3/Q4 2020. In the medium-term though, as demand recovers, refiners could benefit from the stockpiled low-cost crude for better margins.

14 Million b/d

Total global refining outages

8 Million b/d

COVID-19 related outages

99.8 Million b/d

Global refining capacity

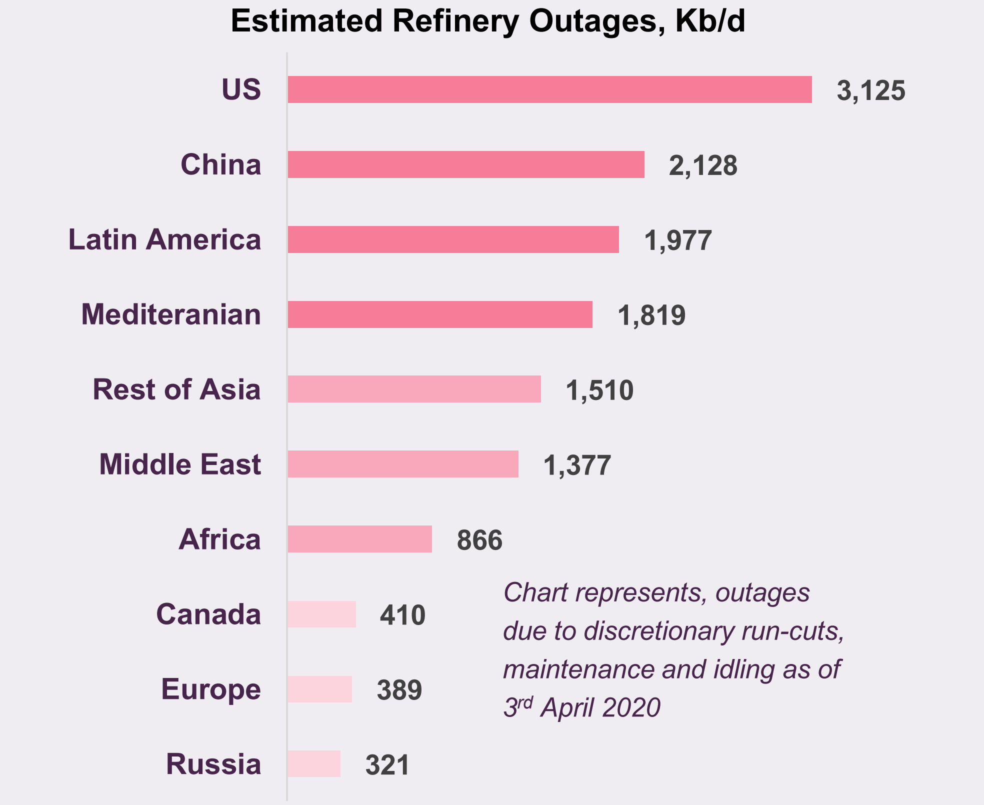

Chart represents, outages due to discretionary run-cuts, maintenance and idling as of 3rd April 2020

KEY CONSIDERATIONS

Planned maintenance pushed back

- Fear of contagion of COVID-19 in plants from contractors brought in for work

US refiners to make deeper run cuts

- Increasing demand loss in the US
- The lack of export capacity also pressuring refiners top shut-down

Case of China & India

- China registered refinery utilization rates ~70% in March 2020
- Major Indian refiners reduced throughputs by 25-30%

 Sources: SP Global – Refining Analytics; Evalueserve Analysis

Who would survive the crisis ?

The COVID-19 crisis has tested the agility of global E&P portfolios and business models. In addition to big-oil, ones with integrated model, advantaged acreage and balanced portfolio are best placed to survive the crisis.

Winning attributes

Integrated model

During low oil prices, integrated companies benefit from higher margins in refining & chemicals, despite the E&P losses

Diversified portfolio

Diverse asset-base helps balance long & short cycle investments and optimize break-even costs for better cash-flows

Premium acreage

Signifies asset-holdings with production breakeven below $25-$35/bbl. Currently only 16 US shale producers fall in this category

Debt-servicing capacity

Oil companies with resilient and leaner portfolios are able to sustain enough cash-generation to meet their debt-liabilities and reduce solvency risk

Risky bets

Risky debt-funding

Significant exposure to junk or high-yield bonds pose solvency risks and higher interest expenses

Aggressive pure-play E&PS

Companies focused only on E&P but suffer from high OPEX and risky CAPEX commitments. Deliver while high oil prices.

Concentrated portfolios

Small and mid-caps with limited asset-holding. Lack agility in portfolio to react to market conditions

 Sources: Company Filings 20015-19; Company Investor Presentations 2015-19; Evalueserve Analysis

When are the oil markets likely to recover ?

The demand loss would weigh on oil prices during 2020, but OPEC+ compliance to production cuts, COVID containment by Q2/Q3 2020 and slow-down in the US production, could accelerate the recovery of oil markets during 2021-22.

EARLY CONTAINMENT OF COVID-19

Aggressive quarantines are expected to contain COVID by end of Q2’20 or beginning of Q3’20. This could help relieve demand-side pressures on oil markets by end of 2020

COMPLIANCE TO PRODUCTION CUTS

If the OPEC+ and other G20 comply with their committed production cuts for 2020, it would substantially reduce stocks from 2H 2020 onwards and help oil prices recover

DECLINE IN US PRODUCTION

Decline in US Shale production due to market-driven demand loss combined with – conservative CAPEX programs and inadequate debt-funding for Shale projects

BUSINESS CONCERNS FOR OIL COMPANIES

SHORT-TERM

- Ultra-low oil prices <$30/bbl
- Dividend payouts
- Delay in new project FIDs
- Lack of growth CAPEX
- Solvency issues and debt-servicing

MEDIUM-TERM

- Likelihood of sustained oversupply
- ROI pressures
- Lack of funding for long-cycle projects
- DEBT Repayment
- Potential OPEC+ fall-out / Price war

 Sources: Evalueserve Analysis

Authors

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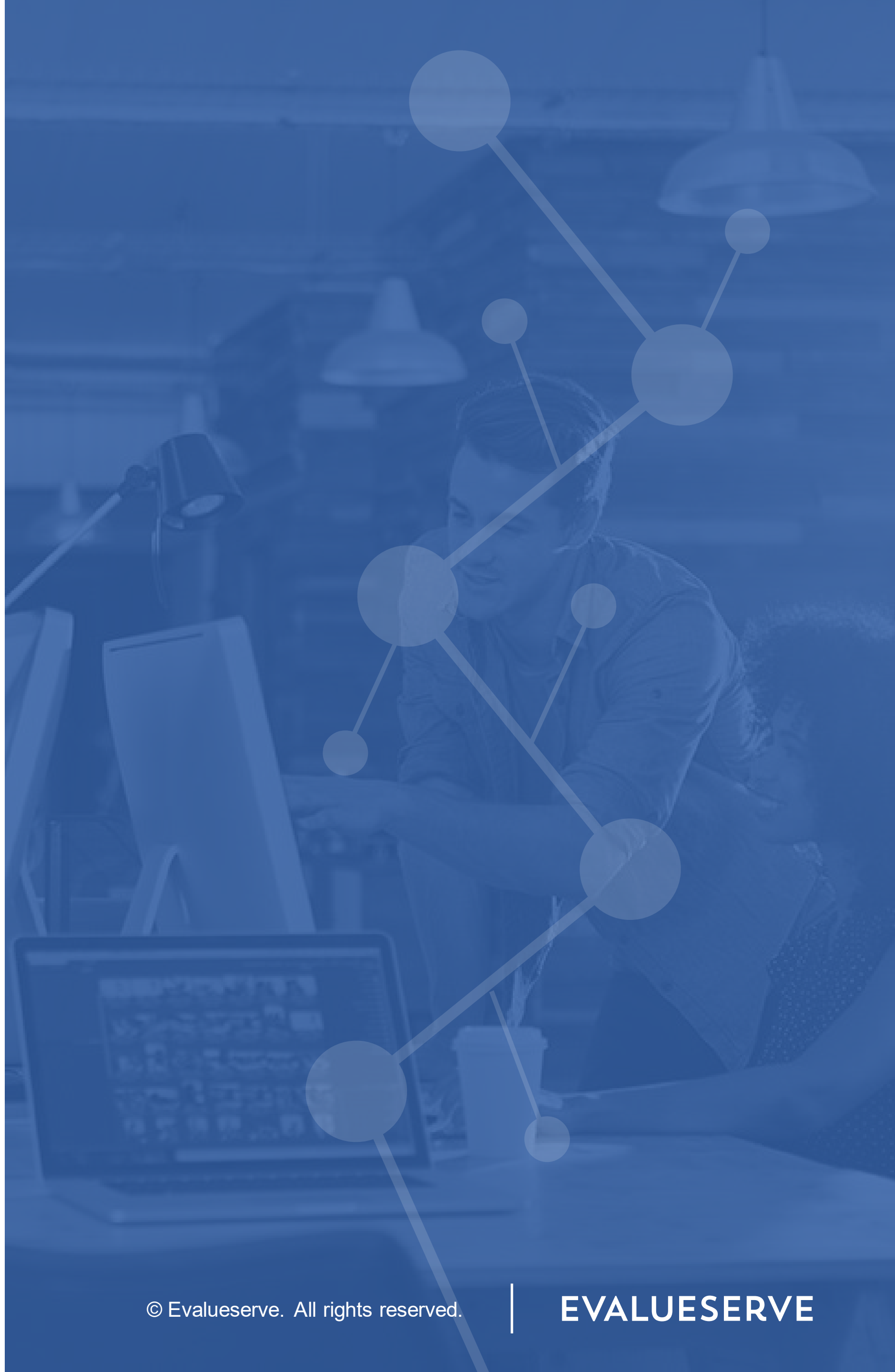

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