USC's Viterbi School of Engineering Expanded Focus on Smart Oilfield Technologies

Intro

Building on its successful 13 years of operating the Center for Interactive Smart Oilfield Technologies (CiSoft) with Chevron, USC is expanding its partnership model into a broader "center of excellence" covering all aspects of its current and future smart oilfield strategy.

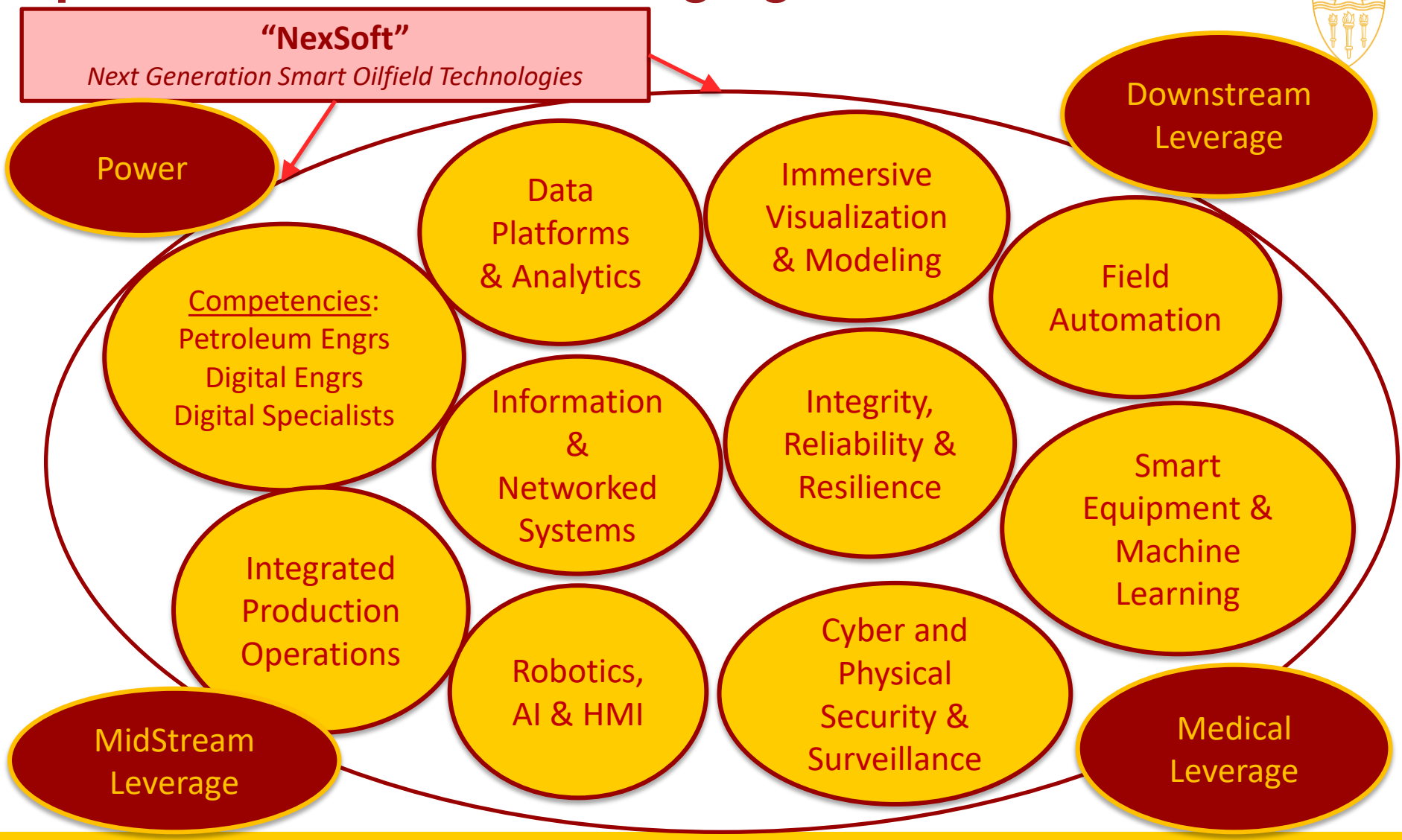
The new "center" is seeking new strategic partners with competencies in current smart oilfields, enabling expansion into new areas related to advanced sensors & monitoring, robotics, emerging analytics, data sciences, cyber & physical security, machine learning, and human-machine interfaces. The intent is to develop technologies and competencies in all aspects of integrated operations and smart oilfields.

NexSoft
Next Generation Smart Oilfield Technologies

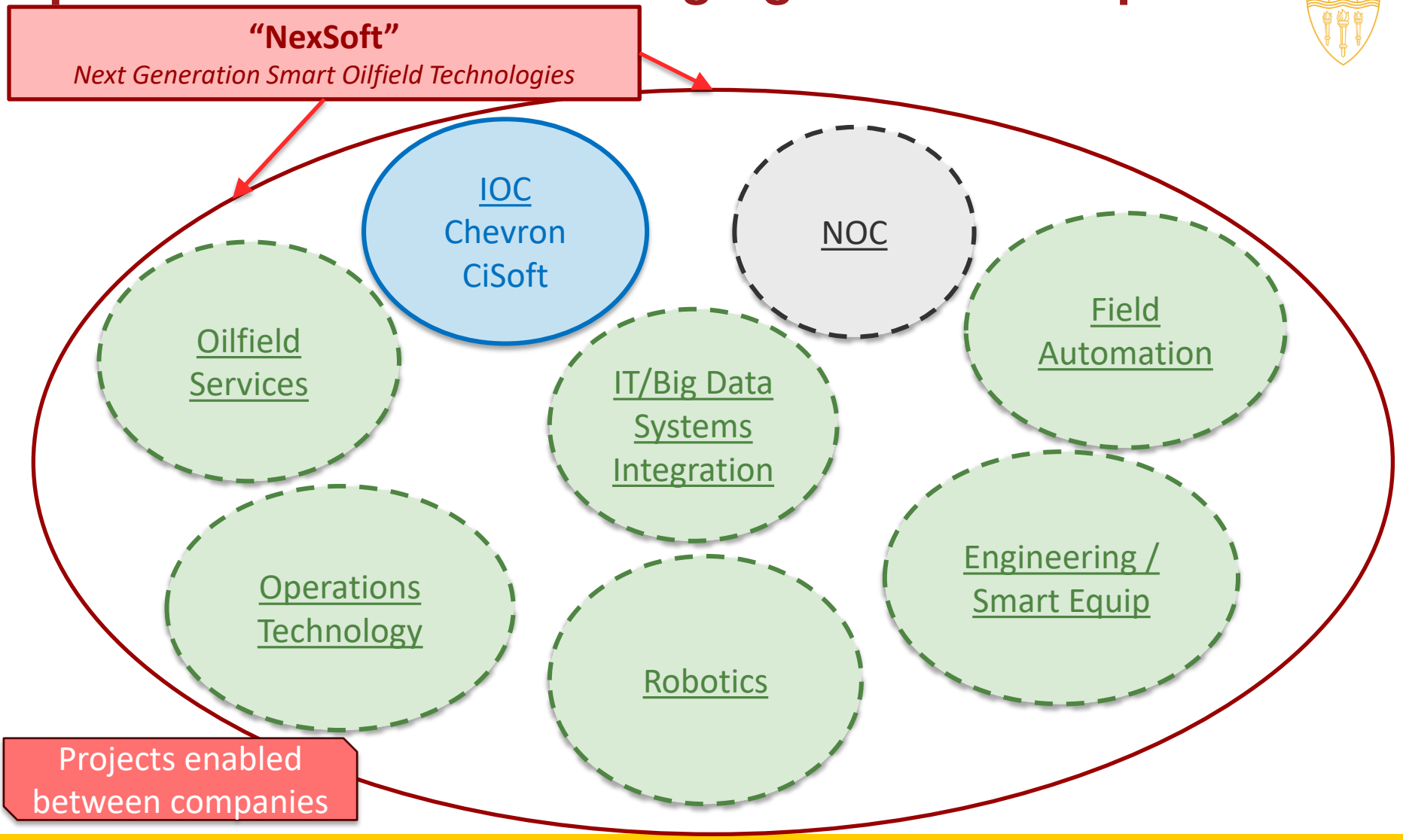
Vision

The next generation of digital oilfields is here.
To meet the industry challenges ahead,
With a track record of leading R&D in Smart Oilfield Technologies,
USC offers an ‘eco-system’ of strategic partnerships
Committed to the required competencies
That enable innovations for new emerging areas, with
Business-focused R&D, education and commercialization sponsorship.

Updated Model for a Changing World: Focus Areas

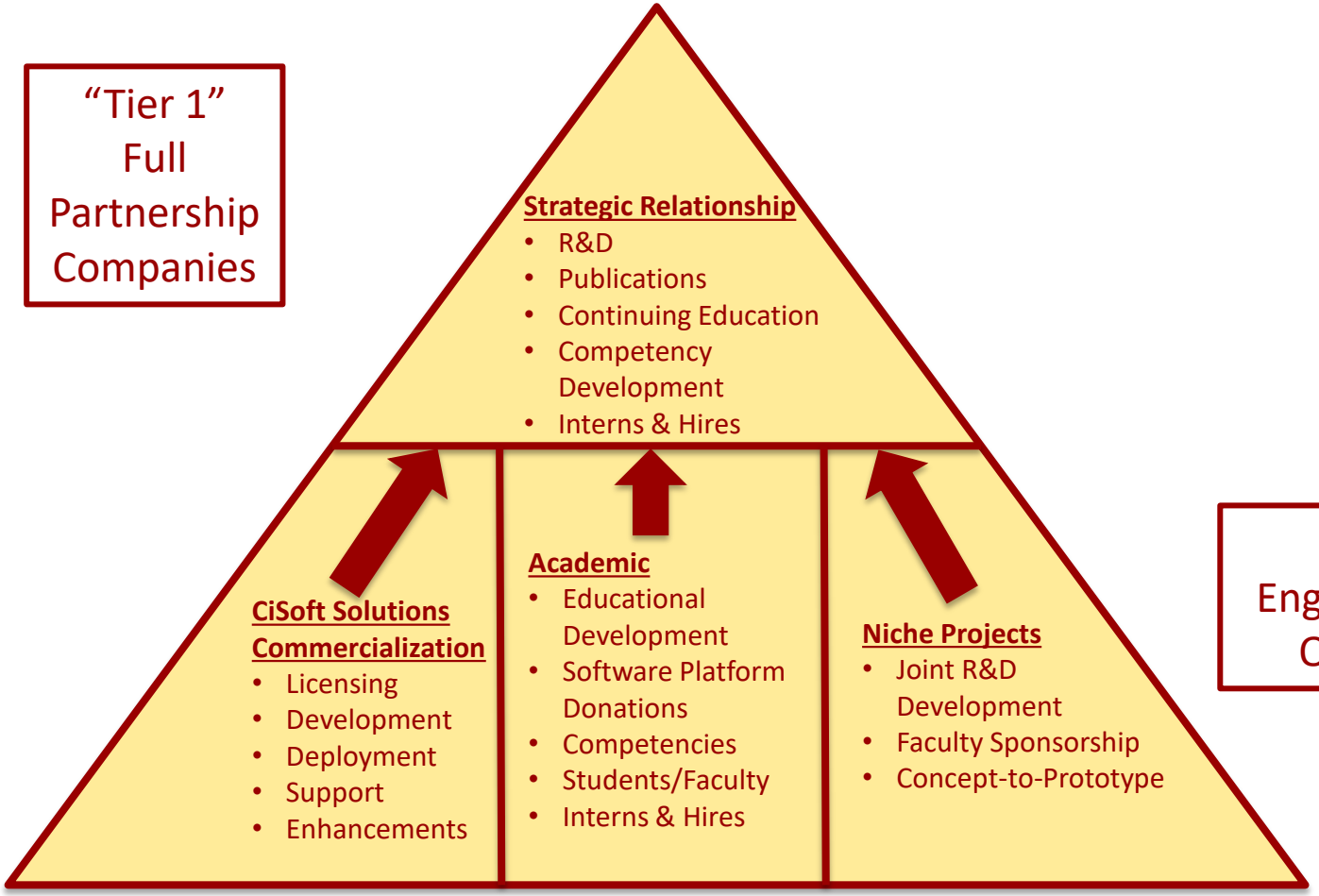


Updated Model for a Changing World: Companies



Partner Participation Options

"Tier 1" Full Partnership Companies



Initial Engagement Options

NexSoft Operational Structure

"Tier 1" Companies

OIL & GAS VERTICAL

Drilling & Production

Surface Facilities

Field Automation

Integrated Production Operations

Safe & Reliable Operations

Engineering & Equipment

NOC

Chevron CiSoft

Major Oilfield Services

Field Automation

NexSoft PARTNERS

CiSoft Solutions
Licensing Agreements
(managed outside of NexSoft)

IT / Big Data

Integrity & Reliability

Cyber & Physical Security

IIoT & Networked Systems

Data Analytics

Field Data Capture

Smart Equipment

Visualization / Modeling

New Competencies

Systems Integration

Machine Learning, HMI & AI

Robotics

Government Agencies

Solutions & Systems Integrator

IT Services

Operations Technology

Niche Specialists

Other Universities, Labs & Centers

ENABLING TECHNOLOGIES + CONNECTIONS TO OTHER INDUSTRY VERTICALS