

Innovation Ecosystem Module 4: The Value Proposition in an ERC

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A Career in Value Propositioning

COMMON THEME -----> Value Proposition & Innovation!!



Experience

72-76	BSc Biology	Biochemistry & Pharmacology
77-81	PhD Biochemistry	Biochemistry & Toxicology
81-88	Scientist	Starch Biochemistry
88-94	Manager	Plant Biochemistry & Seed Traits
94-00	Founder & Director	Maize Biotechnology & Traits
00-08	Unit Director	Biotechnology & Biorenewables
08-19	Innovation Director	Biorenewable Chemicals
18-	Innovation Director	Decarbonization Chemicals

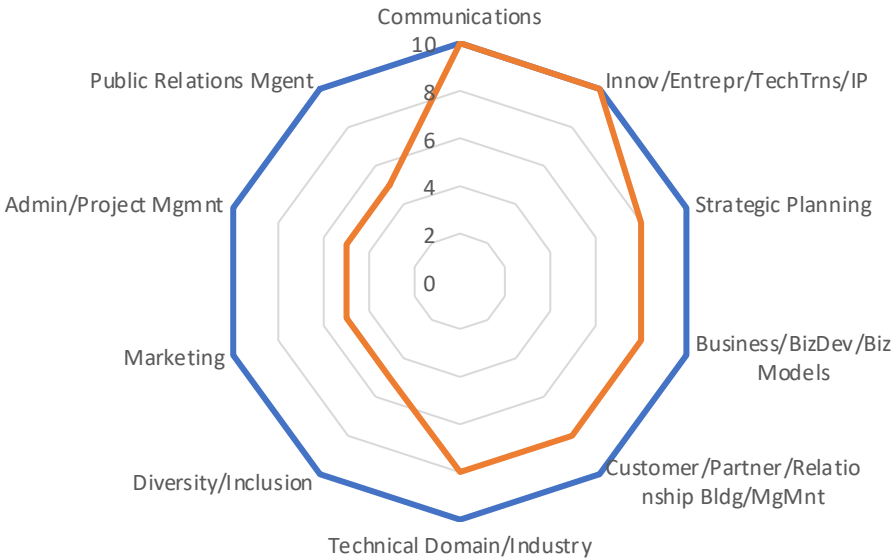


ILO Role – Multiple Dimensions

Direct and Implement strategies to develop the Industrial Membership and Innovation Ecosystem Program in the Center.....

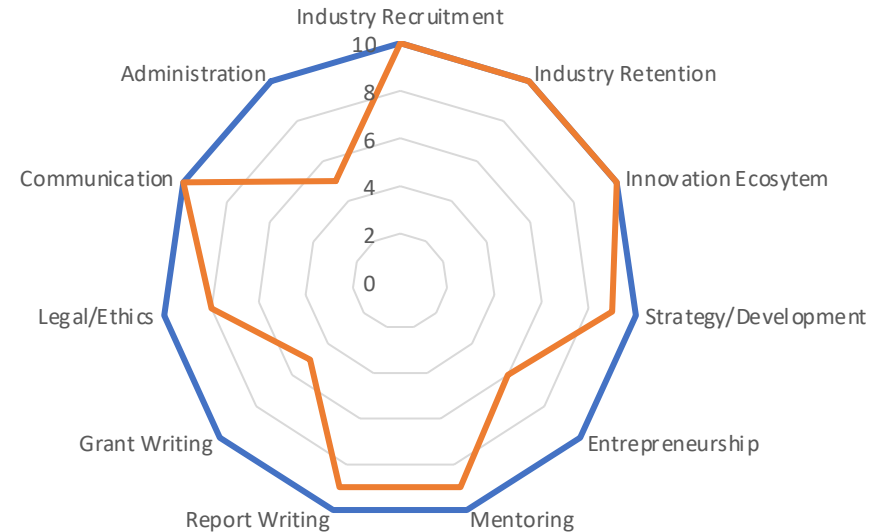
Management & Communications

— ILO Role — Distributed Role



Membership & Innovation

— ILO Role — Distributed Role



Value Proposition

“A value proposition is a **promise of value** to be delivered, communicated, and acknowledged. Developing a value proposition is based on a review and analysis of the **benefits, costs, and value** that an organization can deliver to its customers, prospective customers, and other constituent groups within and outside the organization.” *Wikipedia*



Value Proposition – Multiple Dimensions

Diagram

CREATING CUSTOMER VALUE PROPOSITION STATEMENT



ERC Value Proposition

The 2012 study polled center leadership as to the single most important area where additional guidance from the IAB is needed, as well as the three most important areas. As with the benefits to industry results, the responses to these queries were similar, so only the three most important areas where additional guidance from the IAB would aid the ERC are reported here. Those areas were (with the percent of respondents):

- Technology road mapping / strategic research direction (54%);
- Sustainability planning (46%) (note: 33% of the ERCs polled were older than six years);
- Understanding how to position technology in the marketplace (31%);
- Technology assessment (23%);
- Support for internships (23%);
- Referrals for partnerships (23%);
- Market assessment (15%);
- Enhancing technical capabilities (staff, equipment, etc.) (15%);
- Student preparation for research in an industrial setting (15%);
- **Understanding ERCs value proposition to industry (15%);** →
- Understanding the competitive environment (8%);
- Entrepreneurship training (8%);
- Support for seminars and workshops (8%); and
- Developing center messaging (8%)

I think this misses the point because ALL of these bullet points are value propositions. There is no single value prop.

A clearly defined value proposition can be a key to success in retaining members in the drive to self sufficiency. How each ERC chooses to articulate its specific value proposition, it must show how the center can provide **substantial benefits to stakeholders, especially industry**, beyond the NSF funding cycle. Industry needs to understand that the ERC can continue to provide financial impact; knowledge; technology; talent; & relationships.

CISTAR Member Benefits

All Members get:

- Industry Advisory Board (IAB)
- Confidentiality: One-Way NDA built into Membership Agreement
- Attend Annual Meetings
- Annual Reports Journal
- Exclusive access to students, faculty, research, innovations, industry members, education programs
- Sponsor research outside of Core

Gold Members get more:

- First option to IP
- IP Oversight Board (IPOB) to support IP filings
- Final rights as "most favored licensee"

Description

Large Entities (500 or more employees)

Medium Entities (10 or more employees, but less than 500)

Small Entities (less than 10 employees)

Silver Members	Gold Members
USD \$30,000	USD \$60,000
USD \$15,000	USD \$30,000
USD \$5,000	USD \$10,000

Membership Benefits

Intellectual Property (IP): Access to CISTAR novel catalytic and separation breakthroughs and innovations in chemical reactor designs with right to recommend IP filings.

Licensing: Priority notification of IP filings. Exclusive rights to review claims. First option to negotiate a commercial use license. Final rights as "most favored licensee."

Confidential Information: Right to request confidential information (requires NDA) on CISTAR research, technology, and inventions for internal research and evaluation purposes.

Advisory Board: Exclusive seat on the CISTAR Industrial Practitioner Advisory Board (IPAB) and invitation to attend biennial meetings and interact with CISTAR leadership team, as well as NSF representatives.

Research Sponsorship: Sponsor individual research programs outside the CISTAR Core, in areas related but not overlapping with the research funded by NSF, university cost-share, and industry membership fees. Submit joint proposals to other federal sponsors.

Research Findings: Exclusive access to CISTAR research findings, insider knowledge, and industry trends for R&D technology transfer, policy, and environmental aspects through biennial meetings, webinars, and quarterly newsletters.

Networking: Access to CISTAR experts in catalysis, separations, reactor design, and engineering economic analysis; professional interactions with a wide range of academia and industry leaders, and companies from the entire alkane transformation value chain.

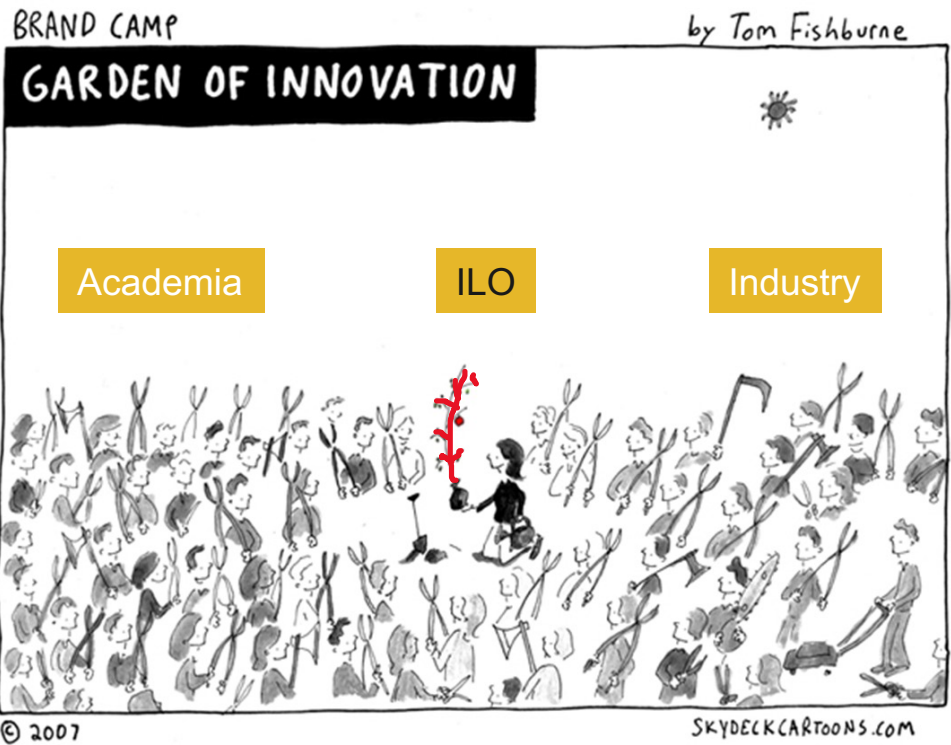
Recruiting: Preferential access to talented, diverse, and highly trained undergraduates, graduate students, and post-doctoral researchers.

Promoting: High visibility branding with all CISTAR university partners, NSF, and other affiliated professional organizations.

Education: Contribute to the education programs and workforce development of new generations of engineers through internships, seminars, speakers, and mentorship.

Silver Members	Gold Members
	●
	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●
●	●

Seems Simple Enough.....



Value Proposition is Core of Business Model Canvas

VALUE PROPOSITION



What do Members Really Want?

How to create products and services customers want.
Get started with...

Value Proposition Design

strategyzer.com/vpd

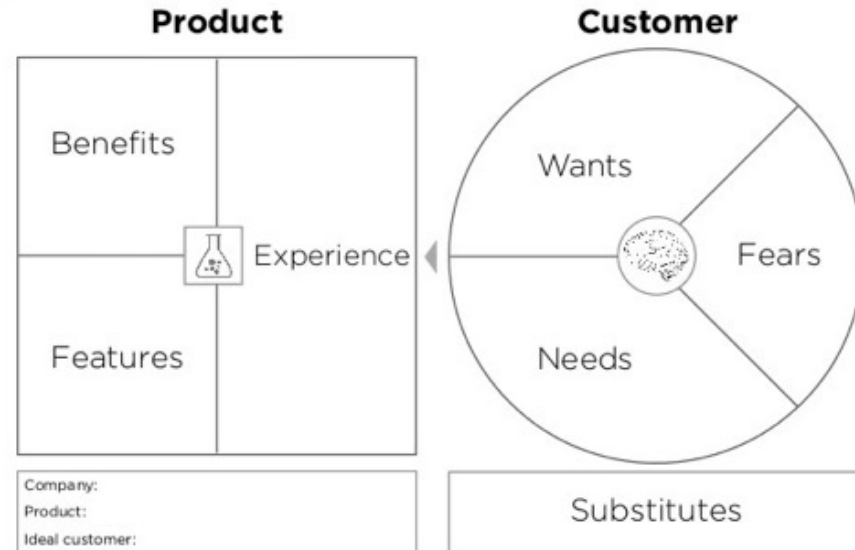
Written by
Alex Osterwalder
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Designed by
Trish Papadakos

WILEY



Value Proposition Canvas

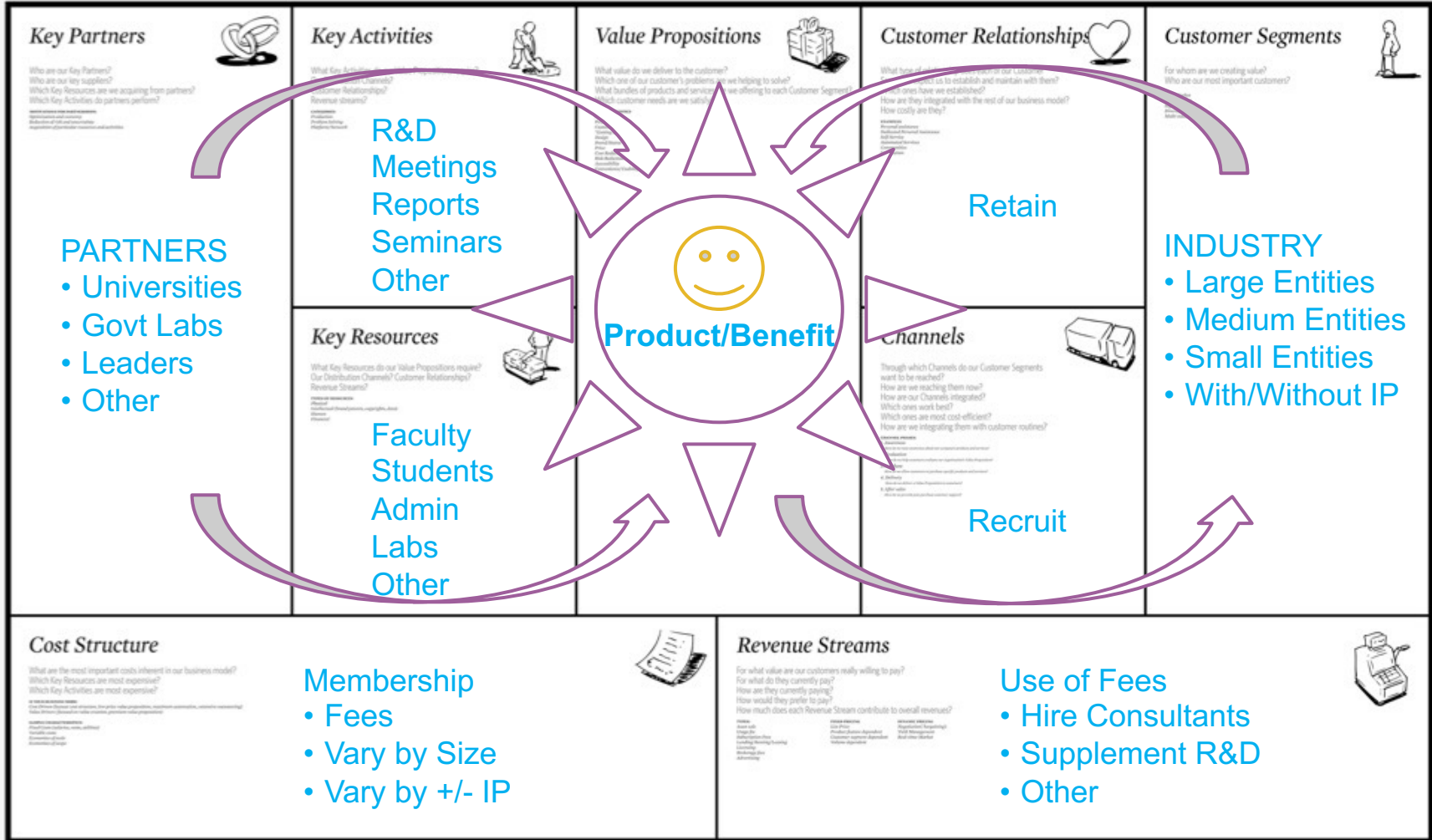


ERC Business Model Canvas

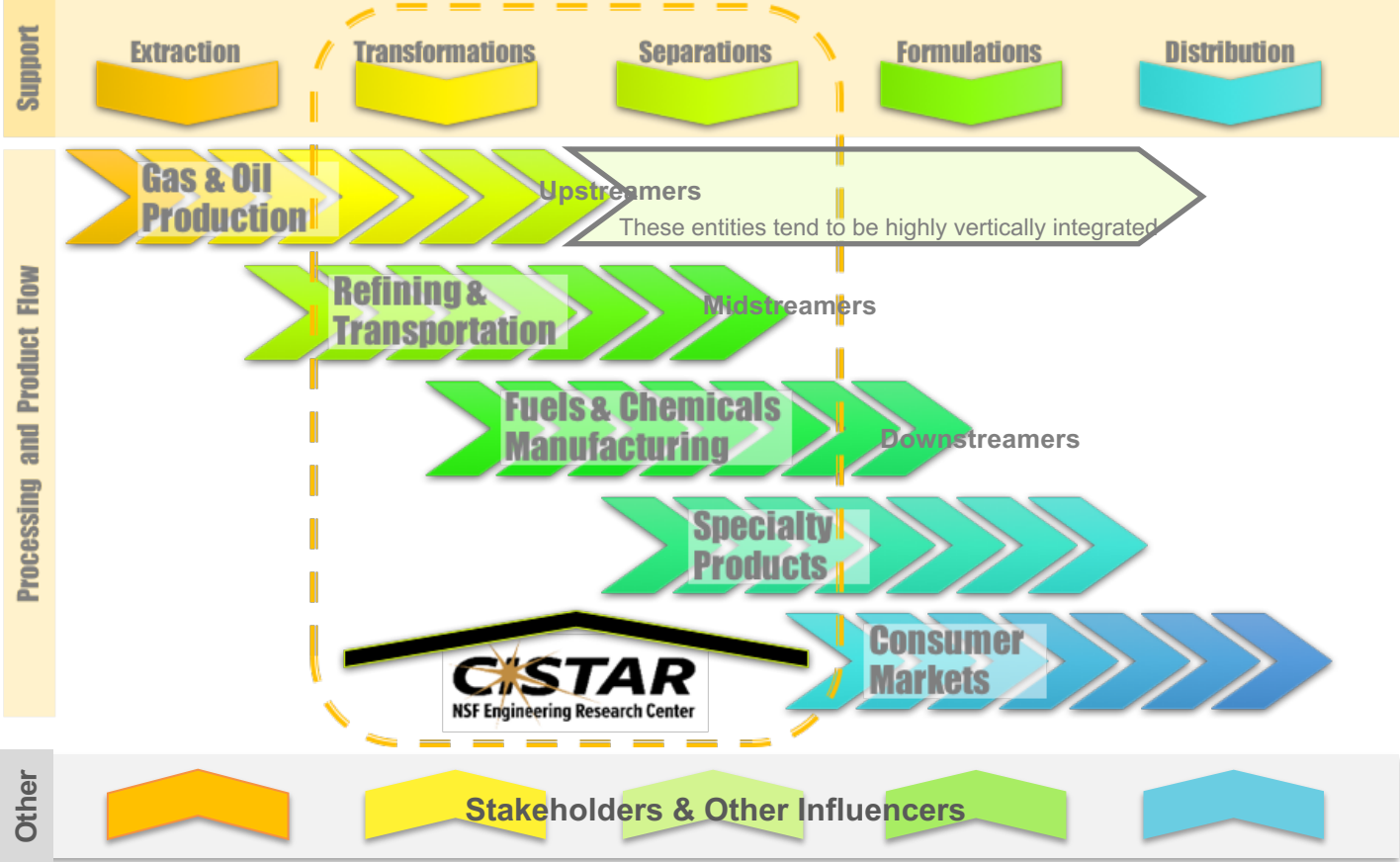
Designed by:

On:

Iteration:



Value Chain – Multiple Needs



Ecosystem – Multiple



Governance & Institutions

- Federal and State Funding
- Next Generation Learning
- Inventions & Innovation
- Interact with Industry
- Jobs & Internships

Research & Technology

- Cutting Edge Science & Technology
- Annual Reviews & Meetings
- Critical Tools & Knowhow
- Webinars & Discussion
- Exclusive Access to IP

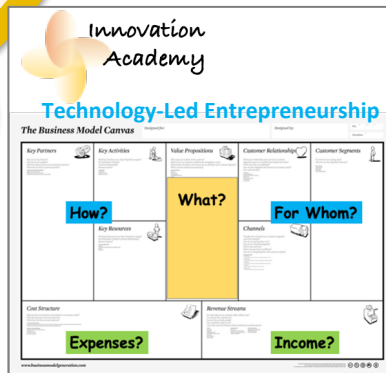


Industry & Partnering

- Networking
- Sponsored Projects
- Advice and Guidance
- Real World Applications
- Partnering Academia/iCorps

Workforce & Diversity

- Jobs and Internships
- Experienced Mentors
- Pitch Contests/Seminars
- Interactions with Industry
- Partnering Education & Diversity



Not a Single Value Proposition – MULTIPLE



What does everyone NEED?

Needs Vary in each ERC and Change over Time



Industry

NSF

Institutions

Faculty

Students

Leadership

Directors

Multiple Value Propositions – You Decide

What does YOUR ERC want?

Industry	NSF	Institutions	Faculty	Students	Leadership	Directors
Research						

Multiple Value Propositions – My Attempt

Industry	NSF	Institutions	Faculty	Students	Leadership	Directors
Research	Industry	Industry	Support	Support	Support	Happy NSF
Innovation	Innovation	ERC	\$\$\$	Innovation	\$\$\$	\$\$\$
Recruit	SWOT	Vision	Sponsors	Jobs	Sponsors	Sponsors
Interns	Value Chain			Internships	Long Term	Long Term
Knowhow	Reports			Mentoring	Sustainability	Sustainability
License IP	License IP			Learn		Help
Insights						
Advise						
Sponsoring						
Partnering						
Faculty						

What do YOUR members want?



Conduct Surveys to Identify YOUR Member Interests

Impact →	1	2	3	4	5
Probability ↓	Negligible	Miser	Moderate	Significant	Severe
(81%-100%)	7	5	7	2	2
(61%-80%)	7	9	14	4	4
(41%-60%)	8	6	9	6	7
(21%-40%)	15	6	8	6	5
(1%-20%)	11	6	5	7	7

Industry members want different things

Closing Advice – Recruit, Retain, Remain



“Every step of the sales process went perfectly except the part where the customer buys our product.”

Thank You

How will you innovate
for a better world?



NSF Core Competencies

ref. ERC Handbook Ch. 5.4 and Elysium Holdings Training



Technology

- Domain working knowledge
- University tech transfer & IP
- Innovation methods/processes
- Tech startups/entrepreneurship



Partnerships

- Recruiting
- Networking
- Relationship management
- Business development



Communications

- Marketing/promotions
- PPT presentations
- Written communication/reporting



Administration

- Advisory board management
- Project management
- Research administration
- Legal agreements
- Accounting/finance operations