

# MISSION-ORIENTED INDUSTRIAL STRATEGY

by , Sarah Doyle and  
Lutz Preussdorff  
July 2014

11014

Publications



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$\int_{\mathbb{R}^n} \varphi(x) dx = \int_{\mathbb{R}^n} \varphi(x) dx$

$\int_{\mathbb{R}^n} \varphi(x) dx = \int_{\mathbb{R}^n} \varphi(x) dx$

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▼ f] r b] f r f f x k f ] k f ] g  
l k r) f f ] x] b r r r f ]  
r r r g r f k r N k f f  
b] f r f ] k ] x k l q b g k b x  
g] q ] x r r k b ] x r r ] b ] n r ) g  
] f k ] x k r r r r g r r r )







~~OUTSOURCING~~  
CAPACITY  
BUILDING

COST BENEFIT  
DYNAMIC  
SPILLOVERS





... x) r) k f [r] n k u r f f r b j  
r r r f r ] f f b k b [x g r r ] t x ] n b r  
f ] r ] n r ] b r ] x ] k r r r r b k x ] k  
r ] r g b n r e b k b r b r r ) r b g ] ] e b  
] g f g [r r r r r r r r k

[ r ] r ] f x k r b ] ] ] x e b n b r x ]  
k l r ) ] [ ] g y ] b r ) ] r f ] g g ] r  
e b x ) r b g ] r [ ] ) ] b ] ) ] n k ] b r



... r ] r ] f x r e n r g ] r x b r g ] b n r  
f [ k r n ] ] r ] e r k ] r ] f f g  
b r r x ] f k r g ] b b f g )  
f b f b r g ] f g r [ r k ] ] g r r ] t x  
] ] r r r r g [ g ] f [ k r  
r f Ax r f r e b [x ] f g ) r b g ] r b ]  
] ) f [ k r ] ] g b [ ] x e b k x ) g  
] f g

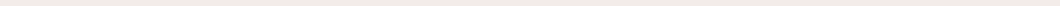
[ r ] r ] f x ] r b r ]  
[ b e k f b k b f g ( ) r r n r ] r ] f r  
] r r x ] b r x ] b ] r b ]  
] b g k r g ] n x r ] r r r ] g ]  
e b ] ] r r r g ] e x g r e  
r ] ] g b k x ] g [ ] g b ] k ] f ] ]  
g [ b [ x k r b k e b x r g ] l b r r ( )

... ] f x ) x ] r ]  
f e f e ] r ] r ] f g e f g ]  
r ) r b b r r r r k r r n r r ]  
n r ] f e r ] ] r e n k x b f r r  
e r ] r g ] f k l r ] g ] n r e f k l e ] r ) j f  
g f ] r r k b r r r r r ] g ] b f f n k  
e r b b r r r r r ) ] g b f ] b ] ] x r f f g  
r r [ r k r n ] b ] b x ) r r r ) r ) ] r g r  
] b ] t r r r ( f ) r ] f ] b ] f ] [ b  
k r r r n k ] x g r ] ] g k r f r g ]

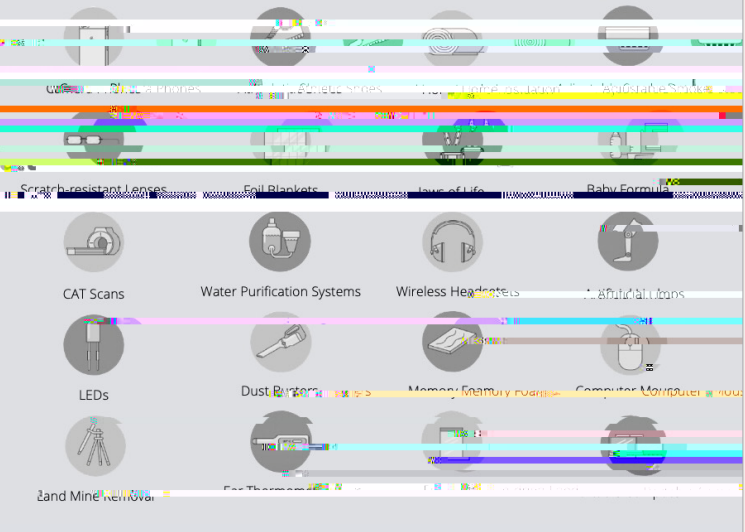




▼ j k ] r r ) k ) ] r n k x k  
] f j k f ) k ] f ] r ] k r ] r



# Spillovers: 20 things we wouldn't have without space travel



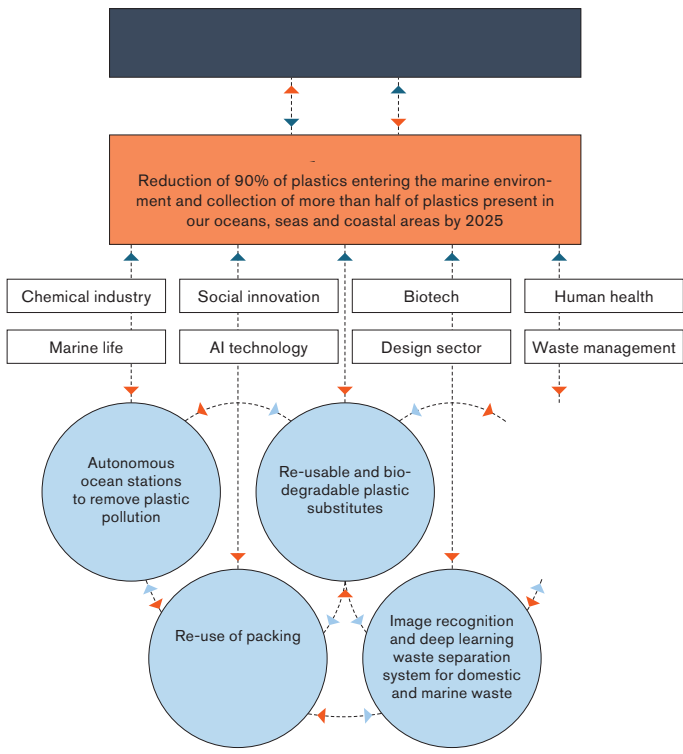
Space travel has led to many technological advancements that we use in our daily lives. Some of these include: CAT Scans, Water Purification Systems, Wireless Headsets, Artificial Satellites, LEDs, Dust Busters, Memory Foam, Computer Mouse, Land Mine Detectors, Ear Thermometers, and many more.





4 . ]f b (x r q q f)k k r g] r (x ] q q k r ] n ) r  
n f)g b g (x g r q ] q k r r ) r b g ] r ] n q q f)k k r b r  
n (x f ] n q b ) r (x q q b r r g] b b n q q k r r  
r b b r r \_ q ] k q ) ] g q g] n g n f q q b b (x g q r ] r ] k r r ) g x  
b ] n q r q ] r ] r n ] r b b q q k g] n q r q r r (x b g (x

... r.] u k rr nk ] n- f r, r i]. n k ] u k ] [y b ]  
... ( g) g : r g] : g \_ k k rr nk rr nk r



2.  $r \in R$  is a unit  $\Leftrightarrow$   $r$  is invertible in  $R$ .  
3.  $r \in R$  is a unit  $\Leftrightarrow$   $r$  is invertible in  $R$ .  
4.  $r \in R$  is a unit  $\Leftrightarrow$   $r$  is invertible in  $R$ .  
5.  $r \in R$  is a unit  $\Leftrightarrow$   $r$  is invertible in  $R$ .

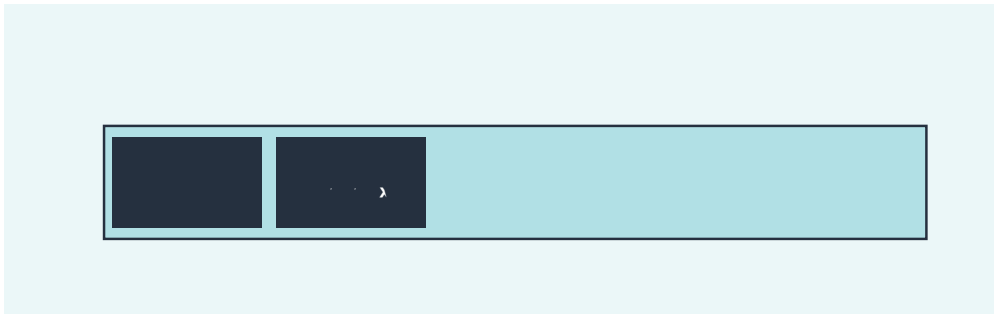
4 4

rr n re] re] f x r g r f n ] r f n ] . r  
k b f r ] f x ) g ] k r r r ] r r ] u b f  
- r g n r ] r k r r r x ) n u n k x

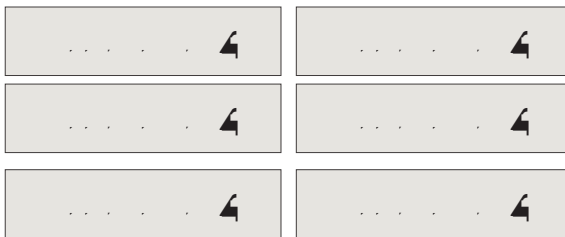
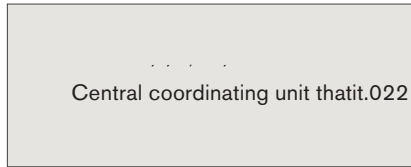
4 4 4 4 4 4

4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4  
k r r ] r r ]  
u k r r ] j r r ) x x ]  
r f r ] f k r r k r r ] r g ] f ] r ] g g ]  
f k r x b g r ] f x

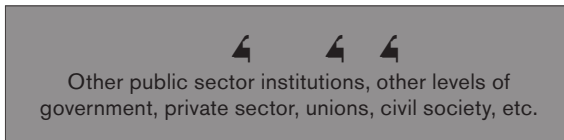
k r r r g f u x ] b ] f u k x g g  
b j f r r r r u r k ) g r g  
j N r ] r k ] x ) g r f g k r r r k  
k r r ] k ] ] r r ] f r ] f r ] b ] f r r  
k r r ] b ] y b ] ) ( M f u ] r r r  
] r r f u k r r r ) r r ]  
r f u k



▼ 2019年11月10日 星期日 10:10:10  
2019年11月10日 星期日 10:10:10



- Responsible for policy development, delivery, managing a network of bottom-up innovation, and monitoring
- Cross-ministerial and cross-disciplinary
- Operational autonomy to take initiative within the mission area









... ] g e n r b ] n ] r f e r f e g ] k r r n e e  
k ] n ] l e - e ] k e ) e j e g ] k e n e  
e r f ] k r r n e e k k n x e ] g n e - ( e  
r e e e e k r r r ] e e k y b ] e ] )  
e e A ( e ] k e n e ] n e r e k e n e  
e e ) e g n e e r e ] x e ] r e x e ] e ] n  
e r e r r e e e e e r e r r ] e f ] r ] r b e r r  
e e f n e r f n f e e ) ] e e e e  
e r e e e r e e f e e e f e e k e g ] r ] e e e  
e e e e r k e n e e r ] e e r k e n e e e g ]  
] e b r ] e ] e e ] e e r e r e f ] e r e y e n ] e k e e r e e  
e e r g e e e k e e r n e e e f e e r r e e k e e b ] e e e ]  
e e k ] n ] e e e x e r e k e n e e ] k e ) e e e f e e k e e e A e e ) e e

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rxr<sup>k</sup> r] b q b ] e b q n g r , q n x ] n o o o g ] r e b f  
b g k e ] r ] r ] n k q ] n u q ] n e q k g k l j e r g b n x r e  
r q f x r ] x r ) b b q k n q b r r r g n o r e o o f o  
] e r ] n e r n r b x r ] r q ] r ] n l e n r o x e n o o e ] n  
- n ( u ) - ( v g r n ) g o o r g M ] - n f b x g ] r r o o  
] q ] n e k b ] e o k n r k k e n g r q f x ] n ] g  
e n ] e b q k n u ] n ] q ] n q b q k n e r ) g b ]  
r o o r e e g ] g x g ] e q b g b g r k e ] n f r ] r n e o ] e  
n r x q ] g o g ] n k ] n ) ] b g q n ] e r ] r ] n ] b ] x f o n e  
u k e e u j ) - (

k ] e o r ] j f b e e e e n o o - n ] u r b e o f ] b  
r o r n - ] x ) g e s ] k e r b y n r ) b b ] g o e r ] n g o b ]  
b o r e ] e l e q ] ] f e k n ] k e ] g r r ] n k ] n ] f e k n e b ]  
e r e e e b g - g ] e ) - ( ] n A A ] e q k n g ]  
b n b r e x e g ] e r n g b ] r o e r ] n ] b ] ] f e e - n o u ]  
g ] ] k r k ] j e b e o o b q k n k e q ] n r ] e n e (

- n ] g e e ] k e r ) n n n ] n n n u u ] e b g r e b q k n  
b e ] k ] e o e n e r ) n , r e q b ] e r n e r ) e o b g n f x  
b k ] n r ] n g o r ] r o - g n g k r r n o n e ] q ] f k ) g u e



## A NEW CULTURE OF PROCUREMENT

### NEW MINDSET

Neutral to intentional

All processes embed values; procurement processes should reflect the values and intent of the commissioning authority

Risk to uncertainty

Acknowledge that the social systems commissioners work within are complex and outcomes are fundamentally uncertain

Transactional to relational

Commissioners are selecting who they want to work with as much as what they want to be delivered, and therefore trust and shared values are critically important

Risk management to risk leadership

Risk is an inherent part of change and innovation, and senior leaders should be challenged on not taking enough risk as well as taking too much risk



6. 00 [x] [f] ... (v) [j] [r] [g] [f] ... ) 2 2 r 2 2 2  
 2] k x r ... ] f ... ] r ... x r ... ] f  
 r r ... ] x ... ] f r ... ]  
 00 k x) 2 2 f ... ] r ... ] f r ... ]  
 ( [y] ) ... ( ) ... 4 k ] r ... ]  
 4 ... r] 2 2 f r ... ] x j r ... ] H ... )  
 ( ... k ] x ] e g r k ... ] k ... ] f r ... ]  
 ... r ] f r r ... ] f k ... ] r ... ] f r g ]  
 x j r ] ... r ... ] ( ) ... ] g ] r ... ] x r  
 f ... ] r ... ] 4 ... ] x ] r ... ]  
 f ... ] r ... ] (

... ] r ] f r ... ] k x ] k ] ... ] f r  
 A f ... ] k ] k ] r ] ... ] f g ... ]  
 x k ] x ... ] r ] r ... ] f ... ] k ... ]  
 ... ] f ... ] x ] ... ] g ... ] f r  
 ... ] k ... ] ) g ] k ]  
 k ] r ... ] 4 ... ] r ... ] g ] r f  
 ... ] r ... ] f r ... ] x j r ... ] k ... ]  
 ... ] g r r ] k ] ... ] ) ... ] f  
 ] f ... ] k ) g ] k ] k ] r ] ... ] r ] r x k  
 ... ] f g f ... ] f ) ... ] x  
 ( f g r ] ... ] f ... ] r ] ... ]  
 ... ] k r ... ] g ] k ] r x

... ] k x ] g ] r ... ] x ] g ] ... ] r  
 ... ] k ] r ... ] g ] r ] g ] r ... ] f ]  
 r ... ] k ] r ... ] ) ... ] k k ... ] r  
 f ... ] r ... ] x ] ... ] f ... ] r ] r g ]  
 ... ] r ... ] x ... ] k r r ] ... ] r  
 ... ] r ] r ] f x r g ] ... ] x ... ] f ... ] f  
 ] r ... ] ) ... ] (



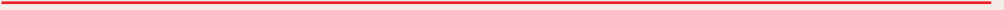


... [k ... ) N ... r ... ] N ... ( ... ) ... g  
... [k ... ) ... r ... ] ... f ... ] ...  
... [f ... k ... r) ... [r ... j ... r ... ) k ... r ... f  
... [k ... )] ... r ... j ... r ... ] f ... r ... ]  
... ( ... r ... ] ... [ ... ] ... r ...  
... ] g f ] r) ... [r ... ] k ... ) ... r ... ] f ... ] ... x ...  
... k ... ] ... j ... k ... r] ... j ... [ ... r ... g f g  
... r ... ] ... k ... r ... r ... ] r ... ] f ... x  
... k ... r ... g ... x f ] r ... ] ... A ... A ... r  
... ] g ... k ... r ... ] k ... A ... [k ... r

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### Box 6: US CHIPS and Science Act

... [k ... ) ... r ... k ... b ... q ... b ... n  
... [f] ... k] ... x ... 4 ... r ... k ... n ... b ...  
... [g) ... k ... k] ... f] ... j ... [k ... ] ...  
... [ ... j) ...  
... [ ... ] ... k ... k ... n ... g ... ] ... r  
... k ... r ... ] x ... ] M ... f N ... r ...  
... ] ... r ... ] ... k ... ] f ... f ... f ...  
... r ... r ... x ... j ... r] ... [f] ... ] ...  
... g f ... ] ... k ... ] ... f ... j ... r M] ... r ... ] ...  
... ] ... f x] ... ] ... j] ... k ... j ... k ... ) ... ( ... ] x)  
... r ... g ... r ... f ... 4 k ... k ... k ... r] ... ( ... ] ( ... )





... ] ... k rr ... r] r] f x r g ... r r b g  
] r b ... ] f ) ... r ] ... r ... f ] ... g ] ...  
... ] x g ] ... k ] x k r ) ... x g ... f f u ... k ... r ...  
A ... f ... ] r ... r ... r ... f ] ...  
... r ] ... k r g ] ... k f ... r ... ] x  
... ] r ... r g ] ] r ] ) ... k k ... r b ]  
... r ... j ... f ] b k k ... ] x ... f ]  
r ... k ... f ] r f ... ] ] r ... k r ...  
b k k ... x ... f ] k ... ] x r b g ... k ... r r g ...  
r r ] r g ... ] ) ... ] r ] ... ] x ... k k ... x ...  
] f ... k ... r ] ... k ... f ... k k ... r ] ) ... k r g ]  
] f ... g ... r

... ] ... r ) r ... x r ... f ] ... ] b ] b ] ... ] r ] r b b ]  
- r k ... ] ... r ... k b ] ... ] r f g r )  
... f ... r ... ] ... x ... k ... r g ] ... g ... k ...  
... r ... f ... k ... r ... f ... r k ] x ] r  
... k ... r ... r ... ] ... k ... r ] ... r g ] b ] r ... x  
... ] ... ] k r r ... ] r ] r ... k ... ] ... x ... k ...  
b ... ] r ... r ... r ... ] ... x k ] r ... r ...  
k ... k ... ] ... f ... b ] ... ] r ... ] ... ( ... r r ... r  
r g ... ] ... ] r g ] ... r r ... f ... r ] ... ] r ) g ... f ... j  
r g ] ... ] ... f ... ] ( ... r g ... ( ... x ... ( ... b ... )



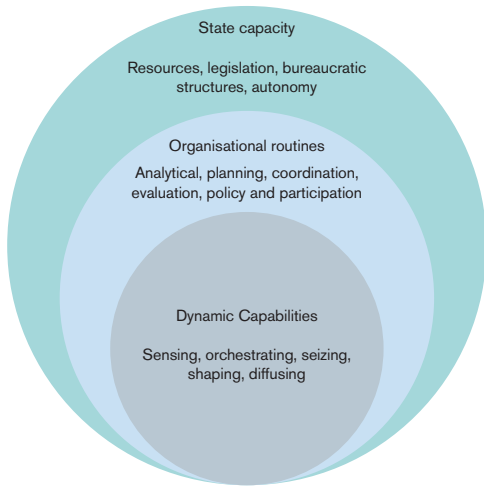














☒





rg b r r x b x r j f g r  
j f g x f x k b e j b r  
r x k b r r k k r r r r  
k b r r r k b r g g g ] r k y b ]  
] ) k y b ] ) ( k g ] x k r r r ] g l r f g ]  
r r r r r k r r ] r

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... g\_n ]^b\_n k x ... r r f ... k ... r  
rxr^k b ... ] r ... f ... k x ... ] r f ... r  
] r r ... ] r ) ... f ... ] ... k b f ... r  
f ... ] r ... r

k ... ] x ... f ... r ] r ] f x ] ... k r r ... r ] r ] f ... f ...  
b ] ... r ] ] ... f ... ] ... k ... ) ... f ... k ] ... ] ...  
r ] f ... ] ... ] ... ] ... k ... r k ... j ... r ] ...  
] ... ] x ... k ... r ... r ( ... r ... r ...  
] ... ] ... f ... k ... r ] ... ] r ... ] ...  
... k r r ... r ] r ] f ... r ... ] r k ... r ... f ... k ...  
b ] ... r ... r ... ) ... f ... ] k ] ... r ] ... ] ...  
... r ... r ... ] ... r ] ... f ... k ... x ... ] ... r

M ] x ... ] ... r f ... f x ] ... ] r ... ] rxr^k r ... r ... r  
b ... ] k ... ] r ] ] ... ] ... ] ... r ) ... x ... ] ...

v ... ) ... ] ... k ... r ... f ... ] ... x ... k r r ...  
... r ] r ] f ... r ] ... r f ... ) ... r ... r ] ... x ] ... ] ...  
] f ... ] ... k r r ... r ... r ... r ... r ] ... r f ... ]  
] ... r ... k ] ... k r ... ] ... k ] ... r f ... ] ... x k ] ... x  
... r ... r ... ] ... ] ... r r ] ... k b f ...

... x ... ] r ... ] ... ] ... f ... ] ... ] ... ] ... (4 (4 ( ( ,









rf q q ] n b ] n - n b ] n q b ] n b b b b  
n b b b k ) k q ] n b r g ] n b b b rr  
f ) b f k f r g ] n b x b j r ) q f j q  
k n l n r k l n l n f k k k n r r ] n b x j q

re] re] f x r ... r] k k ) r ]  
f ... f ... f ... k r ... r ] r r ] ... r r ]  
... r ] r ] f ... r ... r ] x k r ] ... r r ]  
... r ] r ] f ... r ... r ] f f ... k ) r ] ]  
... k ] f ] r ] f k ]

r k r ... ] k r r ... ] ... k r ...  
] ... r ] f ... k r r ] r k ] f ... ] x f ... ] k f ) ]  
] r x r k r ) r ... r r ... r r f ] ... f ]  
... f ] ] ... r ... x ] x ... ]  
r ] ... ] x r ] ... r ] ... r k ... f ... k r r ]  
... ] ... r ] r ] r ] r ] r ] r ] r ] r ] r ]  
... k ] r ) ] r ... r r ... ] ... ) ... k ]  
... ] ... r ] r ] r ] r ] r ] r ] r ] r ] r ]  
] ... ] ... k ... ] f f ... ] x ... ]  
k r r ... ] r k ... ] ... ) ... x f ... ] r ... r ... f ]  
] ... f ] r ] ... ] r ( ... x k r ... r ) ... ] ... r  
... k ... k ... ] ... r ) r ... ] ... ] ... ( ... r r ... ] ... ]  
] ... ] ... f ... ] ... ] ... ] ... ] ... ]  
] r r ... k x ... ] ... ] ... ] ... ] ... ]

r r ... ] ... ] f ... x ... r r f ... r r ] k ... ]  
] ... r ... f ... k ... r ... ) ... r ... ] x ... r ] ... r ]  
... ) ... ] ... r r ... k ... r ] k ... ] r ... )  
... ] ... r ] ... f ... r r ] ... ] ... k x ... r ) ]  
] ... r ] ... ] r ... r r ] ... ] ... r ] ... r r r r  
k ... k ... ] ... k r r ... r ] r ] f x ... r ... f f  
] r r k ... r ] ... r ] ... ] ... k x ) ... r ] ... f r r f  
] ... r f ... r ] ... k ] ... ] ... ] x

... r ... ] f ... k ... r ] ... ] f k ] ... r ]  
] ... r ... f ... ) ... ] x f ] ... ] ... ] r  
k ... k ... ] ...





g k n n] k n r] w a b c d e f g h i j k l m n o p q r s t u v w x y z

g k n n] k n r] w a b c d e f g h i j k l m n o p q r s t u v w x y z

A] f] r] g] h] i] j] k] l] m] n] o] p] q] r] s] t] u] v] w] x] y] z]

A] f] r] g] h] i] j] k] l] m] n] o] p] q] r] s] t] u] v] w] x] y] z]

(A(4\*((v\_f((v\_i)(v\_j), v\_k) v\_l(v\_m) v\_n))

Handwritten musical notation on a staff. The notation includes a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. The notes are written in a cursive, handwritten style. There are some markings that look like 'rr' and 'f' interspersed with the notes. The notation is somewhat difficult to decipher due to the handwriting and the lack of standard musical symbols.

1.  $\int_{-\infty}^{\infty} \delta(x) dx = 1$



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# 4. 4. 4. 4.

Musical notation for the first system, featuring a sequence of notes and rests on a staff. The notation includes various rhythmic values and dynamic markings such as 'f' and 'x'.

Musical notation for the second system, continuing the sequence of notes and rests. The notation includes various rhythmic values and dynamic markings such as 'f' and 'x'.



Musical notation on a single staff. The notation includes a treble clef, a key signature of one flat (B-flat), and a common time signature (C). The notes are mostly eighth and sixteenth notes, with some rests. There are several square box symbols (□) interspersed within the notes, likely indicating specific performance techniques or accents.

Musical notation on a single staff, continuing the piece. It features a treble clef, a key signature of one flat, and a common time signature. The notation includes various note values and rests, with square box symbols marking specific points in the melody.

Musical notation on a single staff. This section includes dynamic markings such as *f* (forte) and *Af* (fortissimo). It also features a section marked with a double bar line and the word *And* (Andante), indicating a change in tempo. The notation consists of eighth and sixteenth notes with square box symbols.

Musical notation on a single staff, concluding the piece. It includes dynamic markings like *f* and *ff* (fortissimo). The notation is dense with eighth and sixteenth notes and rests, with square box symbols marking specific notes.





**INNOVATION**  
**IS**  
**POLITICAL**