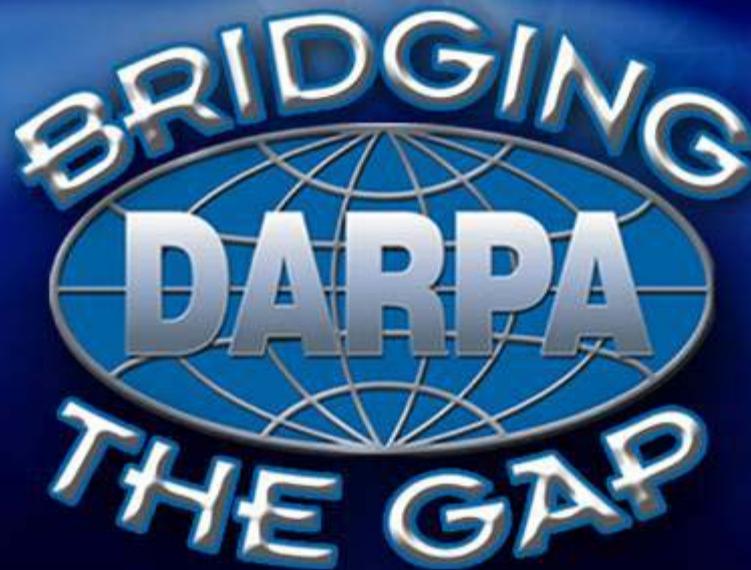


Cognitive Networks

J Christopher Ramming





PERSON OF THE YEAR
TIME
 THE AMERICAN SOLDIER





At your service

The courteous girl at the switchboard speaks the first word in more than two million conversations an hour. Presiding day and night at the busy intersections of speech, she is always at the call of the nation's homes, farms and offices.

Out of sight, and most of the time out of hearing of the subscribers, little is known of the switchboard girl—of her training and supervision under careful teachers, and of her swift and skilful work. Likewise, little is known of the engineering problems necessary

telephones within the reach of a girl's arm, or of the ceaseless work of maintenance which in fair weather and storm keeps the mechanism fit and the wires open.

America's millions of people must have at their command means of direct and instant communication, and the Bell System must ever be in tune with the demands of national service.

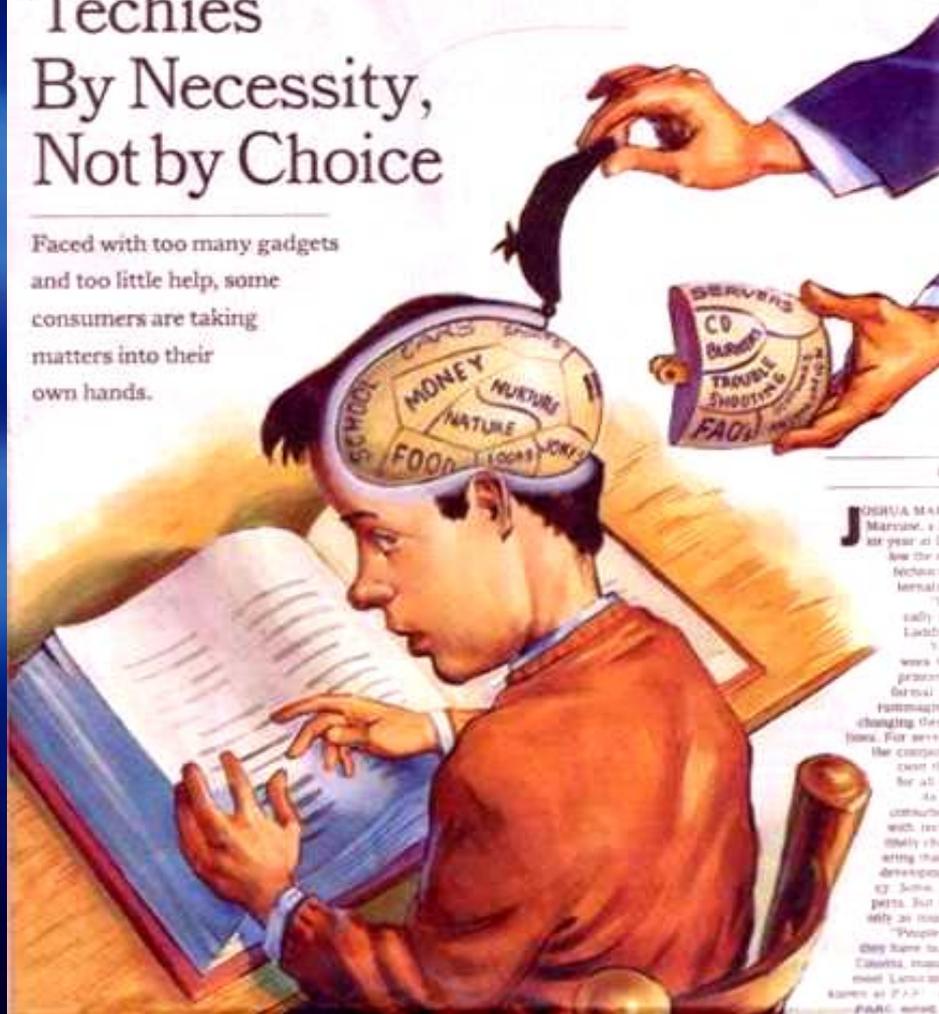
These are the components of America's system of telephony: The best of engineering, of manufacture, of facilities—and a personnel trained and

Circuits

The New York Times

Techies By Necessity, Not by Choice

Faced with too many gadgets and too little help, some consumers are taking matters into their own hands.



JOSHUA MARY
Marsone, a 21-
year-old
New York
University
student,
is
already
Lecturer
at
Yale
University.
He
works as
program
manager
for
the
company
that
he
founded
with
two
other
students
at
Yale.
But
he
is
not
a
tech
geek.
"People
often
ask
me
how
I
did
it,"
he
says.
"I
just
did
it."





BRIDGING
DARPA
THE GAP

Where We Seek Ideas

- Rethinking the application/network relationship
- Domain-specific languages for network management
- Distributed utility functions derived from mission and user goals for online configuration and diagnosis
- Novel approaches to distributed learning and reasoning about networks



