1
00:00:13,310 --> 00:00:07,099
it takes vision knowing where the pucks

2
00:00:16,129 --> 00:00:13,320
going and getting there fast it takes

3
00:00:21,130 --> 00:00:16,139
future vision to be a winner in the

4
00:00:26,810 --> 00:00:24,109
today in the blink of an eye information

5
00:00:29,240 --> 00:00:26,820
flies the continents electronic commerce

6
00:00:32,299 --> 00:00:29,250
the information highway the global

7
00:00:35,870 --> 00:00:32,309
marketplace these aren't just buzz words

8
00:00:40,040 --> 00:00:35,880
but realities changing the way we do

9
00:00:42,049 --> 00:00:40,050
business manufacturing now has the

10
00:00:44,660 --> 00:00:42,059
chance to solve the problems of the

11
00:00:47,450 --> 00:00:44,670
similar computer systems problems that

12
00:00:50,029 --> 00:00:47,460
cause errors create waste and slow

13
00:00:52,610 --> 00:00:50,039

product development in today's world

14
00:00:56,270 --> 00:00:52,620
there will be no manufacturers left who

15
00:00:58,790 --> 00:00:56,280
are not agile it's changing so very fast

16
00:01:01,459 --> 00:00:58,800
that you don't want to lock yourself

17
00:01:03,860 --> 00:01:01,469
into any particular system so therefore

18
00:01:08,240 --> 00:01:03,870
you need standards like step which are

19
00:01:10,250 --> 00:01:08,250
focused on interfacing step it's the new

20
00:01:13,370 --> 00:01:10,260
international standard for the exchange

21
00:01:15,859 --> 00:01:13,380
of product model data and it's no longer

22
00:01:18,950 --> 00:01:15,869
somebody's dream we decided to send a

23
00:01:22,190 --> 00:01:18,960
step file just cold no dialogue prior to

24
00:01:24,530 --> 00:01:22,200
that 2hp folks in Germany they read it

25
00:01:27,230 --> 00:01:24,540
in made some revisions to it sent it

26
00:01:29,420 --> 00:01:27,240
back to us and we write it in it as a

27
00:01:31,130 --> 00:01:29,430
salad with no no fix-up needed or

28
00:01:32,899 --> 00:01:31,140
anything I came over he goes you got to

29
00:01:34,069 --> 00:01:32,909
see this come over to jim's cube it was

30
00:01:35,690 --> 00:01:34,079
actually the first day we just started

31
00:01:37,700 --> 00:01:35,700
communications with it with HP with her

32
00:01:39,170 --> 00:01:37,710
solid designer system and here all there

33
00:01:42,770 --> 00:01:39,180
all of a sudden so quickly we're

34
00:01:45,620 --> 00:01:42,780
actually exchanging solid data but could

35
00:01:48,620 --> 00:01:45,630
it work in the real world the first

36
00:01:50,749 --> 00:01:48,630
product data exchange using stem was

37
00:01:55,130 --> 00:01:50,759
made with a connecting rod between Ford

38
00:01:57,649 --> 00:01:55,140

powertrain and do II allied signal mark

39
00:01:59,959 --> 00:01:57,659
topo of Ford powertrain led Ford's

40
00:02:03,530 --> 00:01:59,969
effort I think it hella quently proved

41
00:02:06,260 --> 00:02:03,540
the point that real parts can be made on

42
00:02:07,850 --> 00:02:06,270
the basis of step technologies and I

43
00:02:09,169 --> 00:02:07,860
think the key for us and is if we didn't

44
00:02:10,430 --> 00:02:09,179
go out and buy a million dollars worth

45
00:02:12,440 --> 00:02:10,440
of equipment to translate this

46
00:02:13,460 --> 00:02:12,450
connecting run we used equipment we

47
00:02:16,160 --> 00:02:13,470
already had once we

48
00:02:17,660 --> 00:02:16,170
got that part translated into our system

49
00:02:19,040 --> 00:02:17,670
he was business as usual and our people

50
00:02:21,680 --> 00:02:19,050
said it was just it was fabulous

51
00:02:24,290 --> 00:02:21,690
geometry was it was perfect geometry the

52
00:02:26,600 --> 00:02:24,300
evolution of the the steps on down and

53
00:02:28,820 --> 00:02:26,610
even now throughout the world can

54
00:02:30,950 --> 00:02:28,830
vendors such as unigraphics computer

55
00:02:33,410 --> 00:02:30,960
vision and the soul are working together

56
00:02:36,530 --> 00:02:33,420
to satisfy their customers needs for

57
00:02:38,740 --> 00:02:36,540
step products we have tremendous

58
00:02:42,980 --> 00:02:38,750
pressure from our customers to

59
00:02:46,400 --> 00:02:42,990
accelerate our step activities our

60
00:02:50,390 --> 00:02:46,410
companies cannot achieve their

61
00:02:53,750 --> 00:02:50,400
competitive objectives without the

62
00:02:57,500 --> 00:02:53,760
availability of much more effective data

63
00:02:59,000 --> 00:02:57,510

exchange capability Peter's Inc is one

64
00:03:01,220 --> 00:02:59,010
consortium accelerating the

65
00:03:04,160 --> 00:03:01,230
implementation of step you moving away

66
00:03:06,320 --> 00:03:04,170
from communicating via drawings to

67
00:03:08,449 --> 00:03:06,330
communicating via data they bring

68
00:03:11,270 --> 00:03:08,459
together 24 of the world's leading

69
00:03:13,190 --> 00:03:11,280
technology corporations and the federal

70
00:03:16,610 --> 00:03:13,200
government in an effort to integrate

71
00:03:18,770 --> 00:03:16,620
step into the way real work is done I

72
00:03:21,890 --> 00:03:18,780
think we've got to be very careful in

73
00:03:24,800 --> 00:03:21,900
not implying that step is a miracle cure

74
00:03:26,630 --> 00:03:24,810
all it requires work you have to

75
00:03:28,910 --> 00:03:26,640
understand it you have to format the

76
00:03:30,259 --> 00:03:28,920
data correctly you'll need expertise and

77
00:03:32,870 --> 00:03:30,269
you'll need people that understand how

78
00:03:35,030 --> 00:03:32,880
to use it after you make the changes

79
00:03:37,160 --> 00:03:35,040
there you just say just a notification

80
00:03:38,930 --> 00:03:37,170
came to him and then he actually pulled

81
00:03:41,780 --> 00:03:38,940
the file oh yeah is that what happened

82
00:03:43,699 --> 00:03:41,790
okay so early pressing technology here

83
00:03:46,720 --> 00:03:43,709
at least our luck Andy version was

84
00:03:50,330 --> 00:03:46,730
successful without something like step

85
00:03:52,130 --> 00:03:50,340
this kind of integrated computing in an

86
00:03:54,229 --> 00:03:52,140
organization just couldn't happen

87
00:03:56,360 --> 00:03:54,239
there'd be too many interfaces to write

88
00:03:58,460 --> 00:03:56,370

the other thing that step will do for

89
00:04:01,130 --> 00:03:58,470
you is in the past what Ford and other

90
00:04:04,280 --> 00:04:01,140
companies had to do was buy a catia to

91
00:04:07,220 --> 00:04:04,290
stl translator Ares to stl translator a

92
00:04:09,259 --> 00:04:07,230
CV to stl translator now they could all

93
00:04:11,210 --> 00:04:09,269
they need is a step to stl translator

94
00:04:12,740 --> 00:04:11,220
and no folo systems put out step data

95
00:04:15,070 --> 00:04:12,750
they've saved that many special

96
00:04:18,009 --> 00:04:15,080
processors down the line

97
00:04:20,500 --> 00:04:18,019
another pilot the National Center for

98
00:04:23,400 --> 00:04:20,510
manufacturing science it's a consortium

99
00:04:26,680 --> 00:04:23,410
of 180 small medium and large

100
00:04:29,860 --> 00:04:26,690
manufacturers is spearheading the rapid

101
00:04:33,220 --> 00:04:29,870
response manufacturing program using

102
00:04:35,530 --> 00:04:33,230
step GM saginaw division and four are

103
00:04:38,830 --> 00:04:35,540
working to exchange unigraphics solid

104
00:04:42,670 --> 00:04:38,840
marbles with Ford's PD GS system and MSC

105
00:04:45,610 --> 00:04:42,680
Ares Saginaw's choice is between

106
00:04:47,770 --> 00:04:45,620
proprietary translators or making step

107
00:04:49,540 --> 00:04:47,780
they are neutral format but the direct

108
00:04:52,960 --> 00:04:49,550
translators are difficult to maintain

109
00:04:55,540 --> 00:04:52,970
the number two they're sometimes very

110
00:04:57,430 --> 00:04:55,550
questionable at number three as versions

111
00:04:59,590 --> 00:04:57,440
of software change they have to be

112
00:05:01,090 --> 00:04:59,600
continually rewritten I think step is

113
00:05:05,410 --> 00:05:01,100

probably the only thing on the horizon

114
00:05:08,040 --> 00:05:05,420
it even has the the whole of even

115
00:05:12,190 --> 00:05:08,050
beginning to solve this problem and

116
00:05:14,860 --> 00:05:12,200
saginaw isn't alone most major US and

117
00:05:19,990 --> 00:05:14,870
European automakers have specified step

118
00:05:22,390 --> 00:05:20,000
as the direction for data exchange now

119
00:05:25,090 --> 00:05:22,400
GM's die management group is pushing

120
00:05:28,150 --> 00:05:25,100
step implementation further employing

121
00:05:30,640 --> 00:05:28,160
level 3 integration a database shared

122
00:05:34,480 --> 00:05:30,650
with business as well as with design and

123
00:05:37,659 --> 00:05:34,490
manufacturing I don't believe before

124
00:05:40,600 --> 00:05:37,669
step you could say that whether it's

125
00:05:45,370 --> 00:05:40,610
engineering data or financial data it

126
00:05:47,740 --> 00:05:45,380
can reside in harmony with each other in

127
00:05:50,110 --> 00:05:47,750
the same database now we can that's

128
00:05:51,610 --> 00:05:50,120
where things have to move to level three

129
00:05:53,350 --> 00:05:51,620
because that's what truly supports

130
00:05:56,020 --> 00:05:53,360
concurrent engineering real-time

131
00:05:57,850 --> 00:05:56,030
information access as you needed when

132
00:05:59,590 --> 00:05:57,860
you need what do you mean it's the first

133
00:06:03,640 --> 00:05:59,600
standard that truly recognizes the

134
00:06:06,340 --> 00:06:03,650
information age and the automotive

135
00:06:08,860 --> 00:06:06,350
industry action group also recognizes

136
00:06:11,409 --> 00:06:08,870
its significance they're helping their

137
00:06:13,360 --> 00:06:11,419
800 member companies make step the

138
00:06:17,299 --> 00:06:13,370

capstone of the new global way of

139
00:06:24,480 --> 00:06:20,879
the first paperless airplane the Boeing

140
00:06:27,629 --> 00:06:24,490
triple7 it's based totally on digital

141
00:06:31,919 --> 00:06:27,639
models boeing has a target to start the

142
00:06:34,499 --> 00:06:31,929
first large-scale version of step mid 95

143
00:06:36,749 --> 00:06:34,509
so if your idea business but boy I would

144
00:06:41,249 --> 00:06:36,759
suggest that you start looking into and

145
00:06:42,779 --> 00:06:41,259
start embracing step concept boeing has

146
00:06:45,600 --> 00:06:42,789
started with their three engine

147
00:06:49,049 --> 00:06:45,610
suppliers GE pratt & whitney and

148
00:06:51,449 --> 00:06:49,059
rolls-royce and their cab members called

149
00:06:53,549 --> 00:06:51,459
arrow step this project requires

150
00:06:56,489 --> 00:06:53,559
delivery of product data in the step

151
00:06:59,429 --> 00:06:56,499
neutral format and they're beginning to

152
00:07:01,649 --> 00:06:59,439
make real breakthroughs recently we've

153
00:07:03,540 --> 00:07:01,659
began to see what we hope to see actual

154
00:07:04,889 --> 00:07:03,550
geometry this looks like what we know

155
00:07:08,879 --> 00:07:04,899
it's supposed to be so we're very

156
00:07:12,359 --> 00:07:08,889
excited it's working we are inches away

157
00:07:14,879 --> 00:07:12,369
from being there we go and what do

158
00:07:16,079 --> 00:07:14,889
Boeing suppliers think about step we'd

159
00:07:18,359 --> 00:07:16,089
like to get out of the translator

160
00:07:20,069 --> 00:07:18,369
business we'd love to get into the step

161
00:07:22,409 --> 00:07:20,079
new profile business so that no matter

162
00:07:23,879 --> 00:07:22,419
what no matter who we're working with we

163
00:07:25,529 --> 00:07:23,889

can send them a step file and they'll be

164
00:07:28,619 --> 00:07:25,539
able to read it into their cad system

165
00:07:30,989 --> 00:07:28,629
use it looking to reduce the waste of

166
00:07:34,290 --> 00:07:30,999
translators pratt & whitney adopted a

167
00:07:36,299 --> 00:07:34,300
single cad system but still we have the

168
00:07:39,839 --> 00:07:36,309
problem where our customers do not have

169
00:07:41,609 --> 00:07:39,849
the same catkin systems like we do and

170
00:07:44,459 --> 00:07:41,619
the biggest problem is that we have

171
00:07:46,679 --> 00:07:44,469
these small cat can companies coming up

172
00:07:49,169 --> 00:07:46,689
with point solutions and these point

173
00:07:51,980 --> 00:07:49,179
solutions are very good say for NC

174
00:07:54,260 --> 00:07:51,990
programming or five axis milling

175
00:07:56,120 --> 00:07:54,270
so it becomes a business sense to get

176
00:07:58,340 --> 00:07:56,130
these points Asians but the bigger

177
00:08:00,590 --> 00:07:58,350
problem that is to actually translate

178
00:08:04,070 --> 00:08:00,600
the geometry to go in and out of these

179
00:08:10,610 --> 00:08:04,080
point solutions and step is the way to

180
00:08:13,360 --> 00:08:10,620
go step is the way to go it's a standard

181
00:08:16,190 --> 00:08:13,370
with dual use commercial and military

182
00:08:18,620 --> 00:08:16,200
consider the lucky Boeing partnership

183
00:08:22,730 --> 00:08:18,630
teamed on the latest fighter jet the

184
00:08:24,890 --> 00:08:22,740
f-22 we can most effectively operate as

185
00:08:30,470 --> 00:08:24,900
a corporation if we have the flexibility

186
00:08:33,200 --> 00:08:30,480
to form these relationships as necessary

187
00:08:36,200 --> 00:08:33,210
for the different product opportunities

188
00:08:39,310 --> 00:08:36,210

at our eyes and step permits us to do

189
00:08:41,950 --> 00:08:39,320
that in a very effective manner and

190
00:08:45,380 --> 00:08:41,960
their strong commitment in the UK

191
00:08:48,290 --> 00:08:45,390
British Aerospace recently stated the

192
00:08:50,990 --> 00:08:48,300
time has come to move forward with step

193
00:08:54,470 --> 00:08:51,000
and step covers more than just

194
00:08:56,510 --> 00:08:54,480
mechanical systems in electronics step

195
00:08:58,880 --> 00:08:56,520
now supports data exchange between

196
00:09:03,620 --> 00:08:58,890
design and manufacturing of printed

197
00:09:06,080 --> 00:09:03,630
circuit assemblies apparel construction

198
00:09:09,110 --> 00:09:06,090
and process industries are also making

199
00:09:18,440 --> 00:09:09,120
headway bringing the advantages of step

200
00:09:21,410 --> 00:09:18,450
2 all once before we seized an

201
00:09:24,130 --> 00:09:21,420
opportunity opening markets never before

202
00:09:26,660 --> 00:09:24,140
imagined competitors cooperate

203
00:09:29,660 --> 00:09:26,670
developing common practices for the

204
00:09:35,820 --> 00:09:29,670
common world it took work it took

205
00:09:42,750 --> 00:09:39,300
step is here it's working it's now right

206
00:09:45,210 --> 00:09:42,760
on the brink of exploding into use the

207
00:09:47,480 --> 00:09:45,220
door has been open and we just have to

208
00:09:50,190 --> 00:09:47,490
do the work now that's catching home in