



DOK-ING

MÜHMI



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**Beginnings of
MyHMI development**



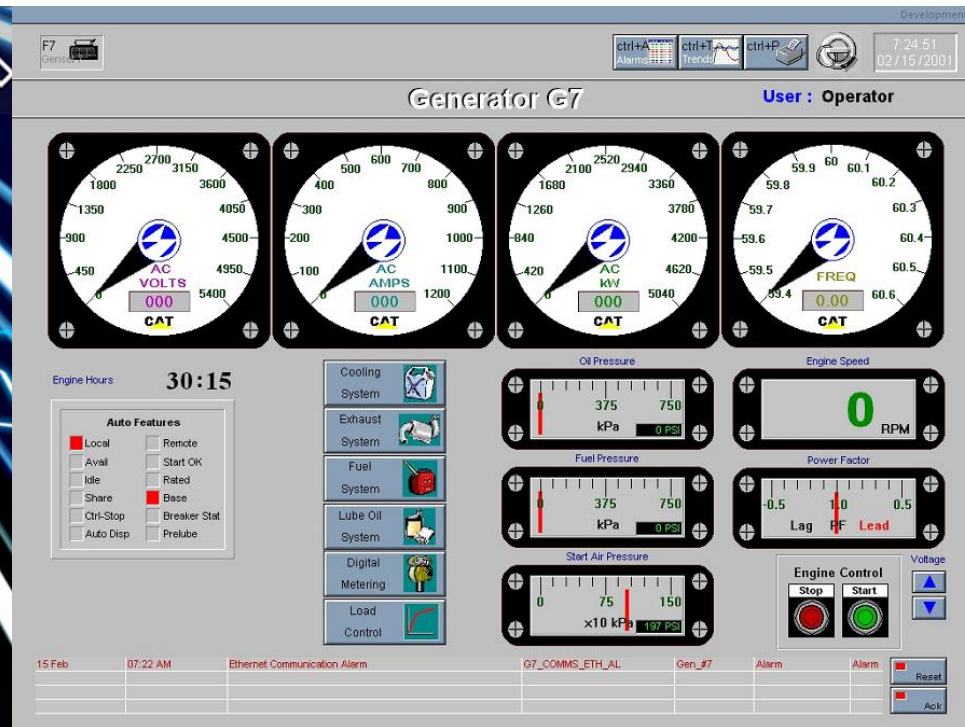
What HMI trends resulted in?



Deep gap in HMIs market:

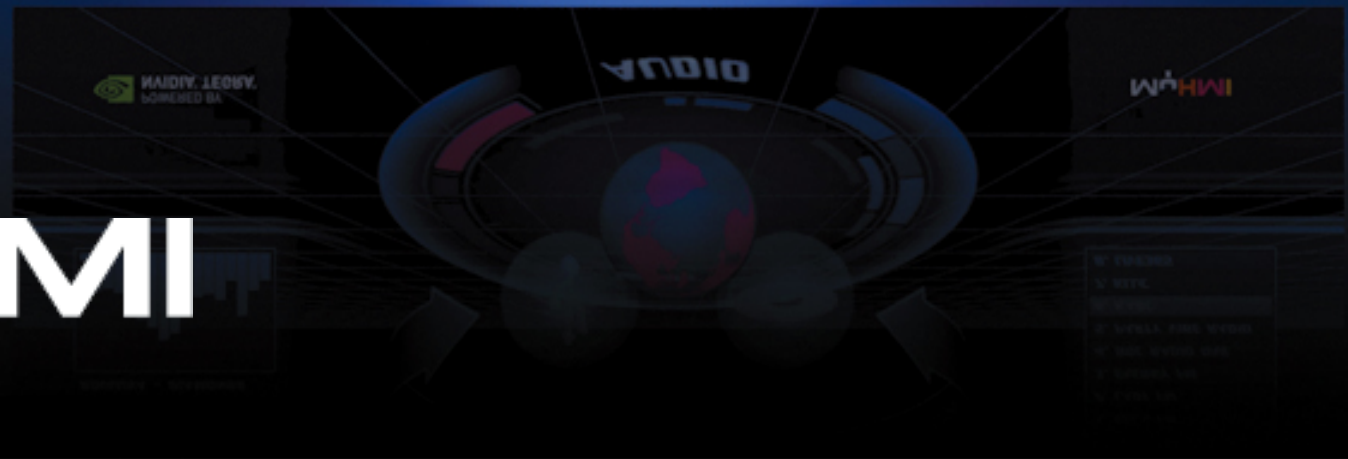


Graphically expressive HMI solutions, with proprietary communication and processing mechanisms



Solutions with vast processing and communication possibilities, but plain graphics

Bridging the gap



MyHMI

Beginnings of MyHMI development

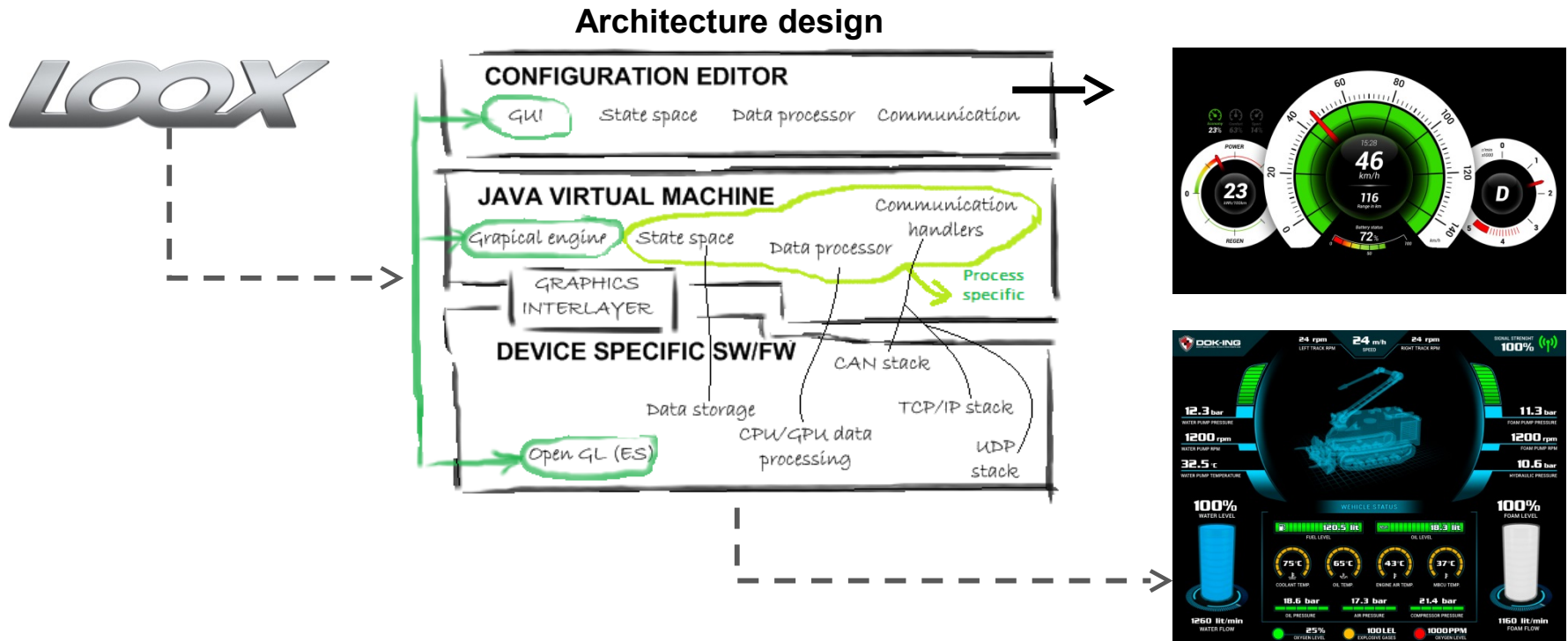


Primary guidance in **MyHMI framework** development:

- vehicle infotainment and instrument cluster applications

In early phases, extensions of those applications were foreseen:

- automation and process control industries



Modules:

- implement certain functionality:
- communication, display, data processing
- encapsulated in **core**

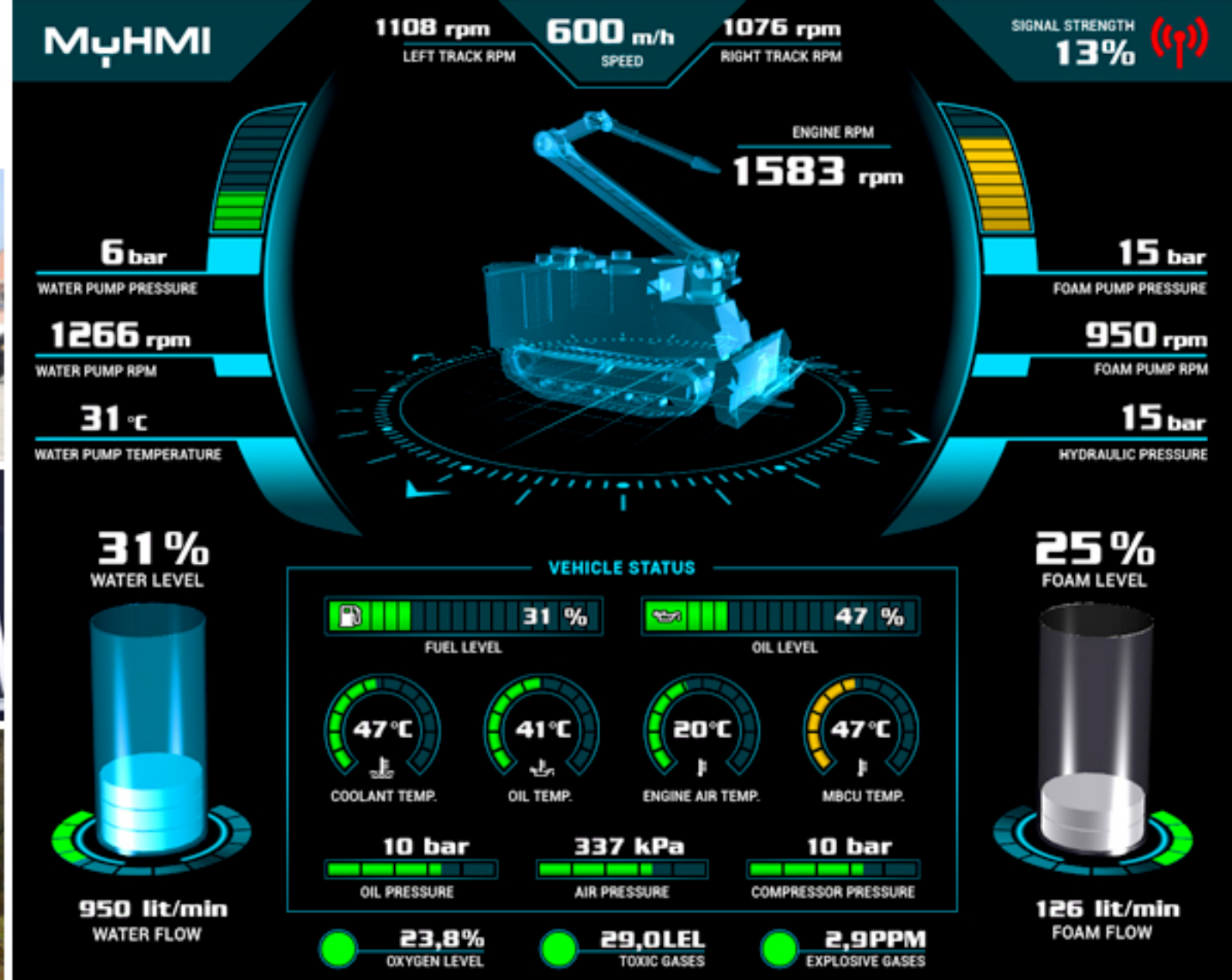
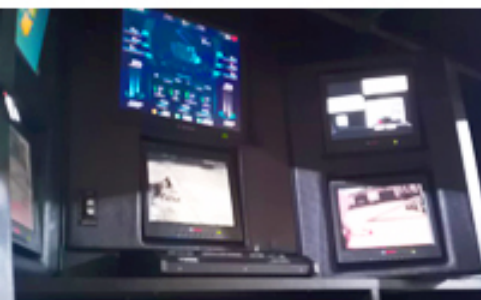
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▶ hr.doking.automotiv.opengl.animation
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  ▶ CharacterSquare.java 2750 08.04.13.10:28 nenad
  ▶ Circle.java 1964 28.11.12.14:41 nmiodrag
  ▶ CircleRadialAnimSL.java 2794 10.04.13.14:51 alan.sambol
  ▶ CurvedBar.java 2801 11.04.13.10:33 alan.sambol
  ▶ Cylinder.java 2359 19.12.12.11:48 nmiodrag
  ▶ Graph.java 2302 16.12.12.14:36 nmiodrag
  ▶ Grid.java 1964 28.11.12.14:41 nmiodrag
  ▶ Group.java 1850 09.11.12.15:56 asambol
  ▶ HorizontalBar.java 2794 10.04.13.14:51 alan.sambol
  ▶ Label.java 3100 11.07.13.13:57 nenad.miodrag
  ▶ LinedMesh.java 1964 28.11.12.14:41 nmiodrag
  ▶ Mesh.java 3097 11.07.13.13:21 nenad.miodrag
  ▶ Sphere.java 1849 08.11.12.15:42 asambol
  ▶ Square.java 2928 27.06.13.08:45 nenad.miodrag
  ▶ StripGraph.java 2302 16.12.12.14:36 nmiodrag
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  ▶ Trail.java 3075 09.07.13.16:34 nenad.miodrag
  ▶ TrendingMesh.java 2302 16.12.12.14:36 nmiodrag
  ▶ WFObjekt.java 2844 16.04.13.10:09 alan.sambol
▶ hr.doking.automotiv.opengl.shaders
▶ hr.doking.automotiv.opengl.utility
▶ hr.doking.automotiv.opengl.widgets
▶ hr.doking.automotiv.processors
```

```
12
13 public class AnimatedSquare extends Square {
14
15     public FloatBuffer fb = null;
16     public FloatBuffer coordBuffer = null;
17     float[] coords = new float[8];
18
19     private int frames = 0;
20     private int currentFrame = 0;
21
22     public void setFrame(int frame) {
23         if (frame < frames) {
24             currentFrame = frame;
25             coords[0] = frame/(float)frames;
26             coords[1] = 0;
27             coords[2] = frame/(float)frames;
28             coords[3] = 1;
29             coords[4] = (frame+1)/(float)frames;
30             coords[5] = 1;
31             coords[6] = (frame+1)/(float)frames;
32             coords[7] = 0;
33             updateTextureCoordinates(coords);
34         }
35     }
36
37 }
```



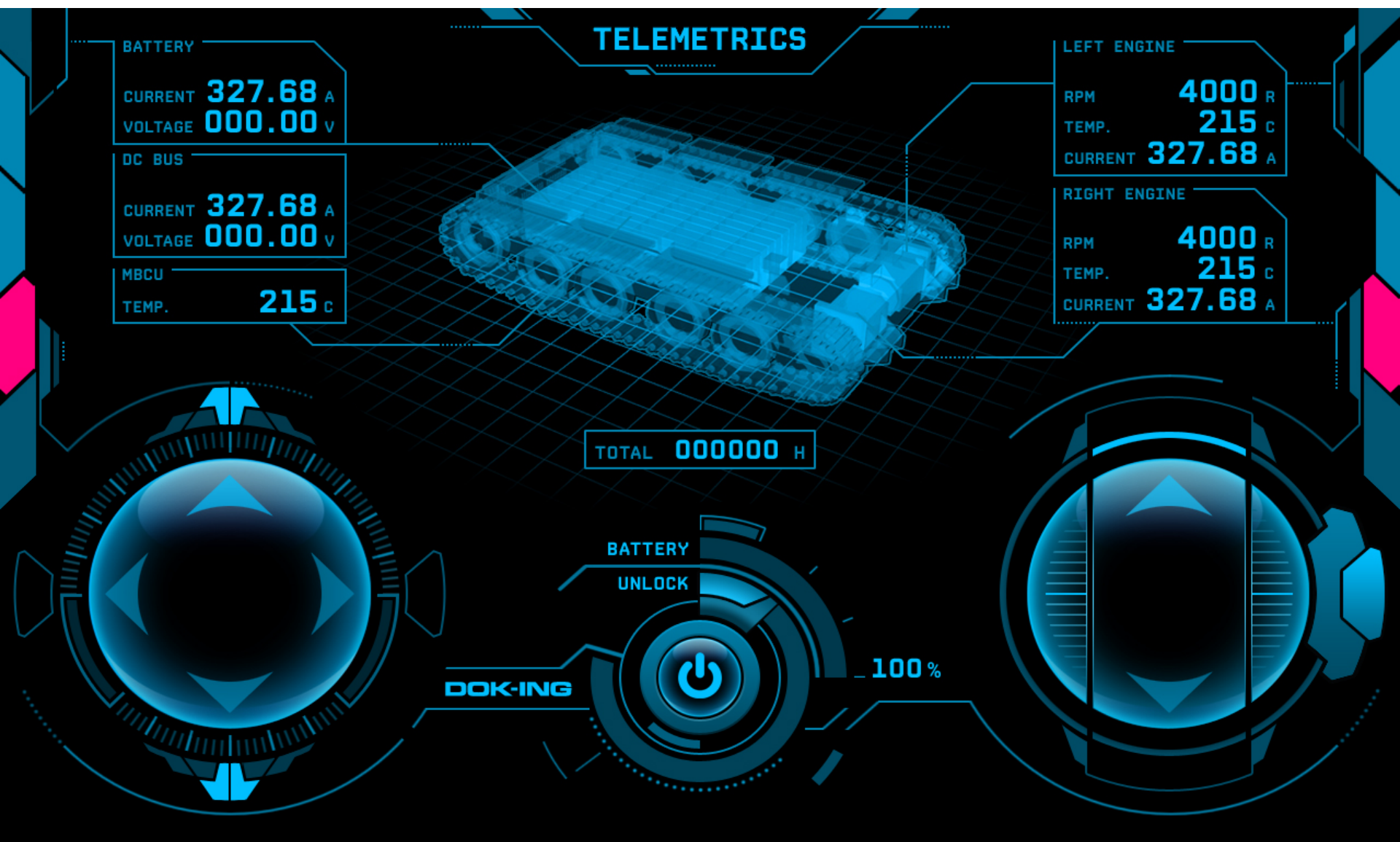

MyHMI approvals in industries

LOOX instrument cluster



MyHMI approvals in industries

UNIMOG



MyHMI in SCADA systems

ULPD remote control